



钢铁厂专用喷嘴

HPZ系列

东莞市长原喷雾技术有限公司
Dongguan Changyuan Spraying Technology Co.,Ltd.

 SAI GLOBA
ISO 9001:2015

 SAI GLOBA
IATF 16949:2016

公司简介



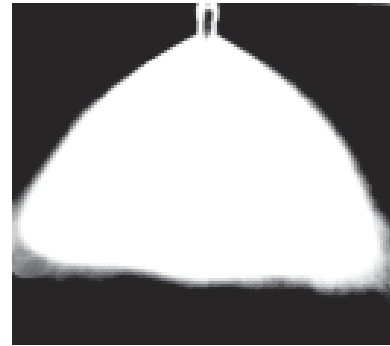
东莞市长原喷雾技术有限公司成立于1999年,是一家专业从事喷雾系统设计,开发,生产的公司,广东省高新技术企业,行业内领导品牌。

长原喷雾技术公司吸收了欧美先进技术,加上自己的潜心研究,设计开发出来干雾抑尘系统专业治理无组织排放PM10及PM2.5的环保产品,产品已广泛应用于港口、火电、钢铁、煤炭、矿业、化工等行业。公司一直精于研发,优良品质铸造高度信赖,并于2018年通过Global Sai的IATF16949认证。

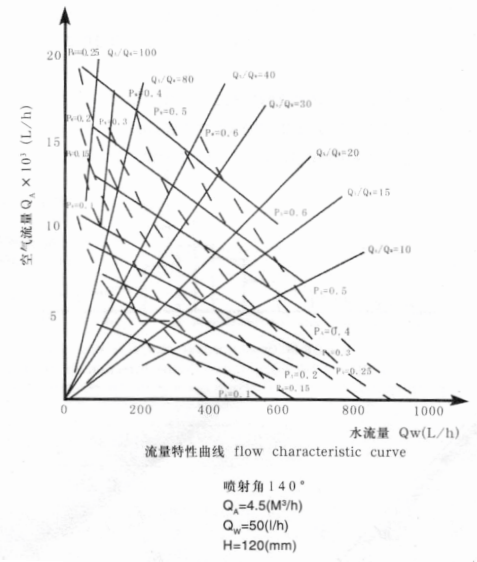
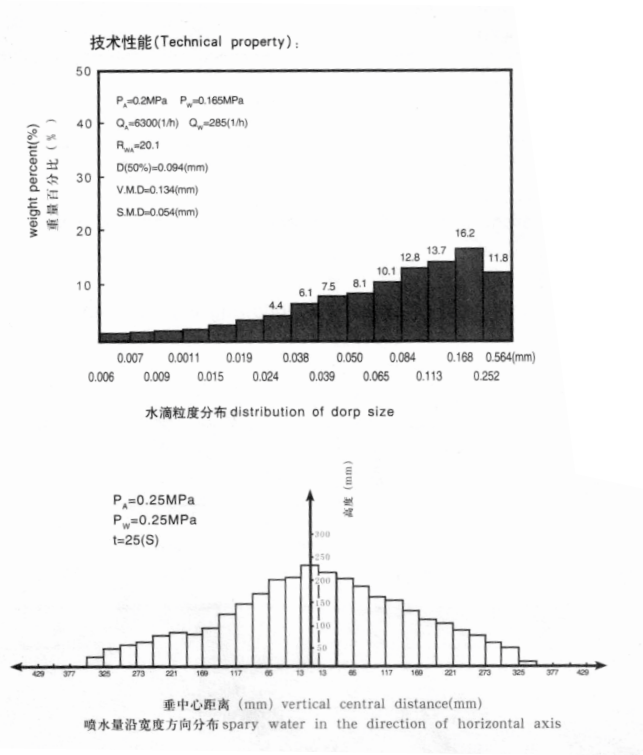


气-水雾化喷嘴的特点：

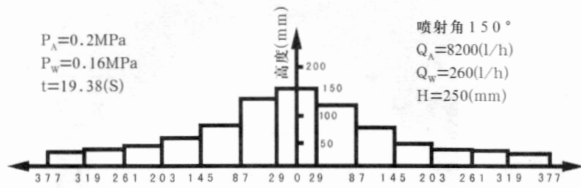
- (1) 冷却更加均匀、水不会在小区域内局部集中，而是在整个喷射面内均匀分布。
- (2) 水量的调节范围大，最小水量与最大水量之比一般喷嘴可达1:10，特殊喷嘴可达1:25，而水喷嘴只能达到1:3。
- (3) 喷雾水滴的直径小，在 $Rwa=35$ 以下时，平均体面积直径均在 $100\mu m$ 以下，大大地提高了冷却效率，故在相同的冷却条件下可节水30%-50%。
- (4) 喷嘴不易堵塞，使用寿命长，在相同的条件下，可减少喷嘴的数量和现场维修量。



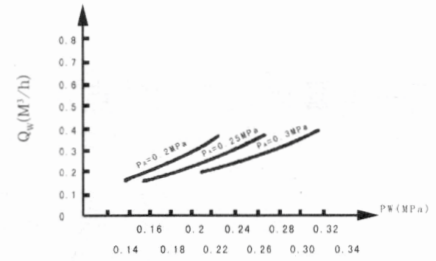
- (1)The cooling is more even,the water can be well- distributed in the whole spray area instead of concentrated in the small area.
- (2)With large flow range the ratio of min & Max flow will be 1:10, and 1:25 in special circumstances. But, for the water spray nozzle the ratio is 1:3 only.
- (3)The diameter of spray drop is small. The average area diameter is all below $100\mu m$ under $Rwa=35$, so as to raise the cooling efficiency greatly. It can save water by 30%-50% under the same cooling condition.
- (4)The nozzle is not easy to be blocked up and has a long service life. It can reduce the quantity of nozzle and maintenance on site under the same condition.



| | | | | | | | | | | | | | | | | | | |
|---|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 0 | 13 | 38 | 65 | 91 | 117 | 143 | 169 | 195 | 221 | 247 | 273 | 299 | 325 | 351 | 377 | 403 | 429 |
| 左 | | 229 | 205 | 198 | 165 | 142 | 121 | 88 | 75 | 78 | 69 | 56 | 49 | 42 | 22 | 2 | 0 | 0 |
| 右 | | 229 | 220 | 205 | 186 | 163 | 154 | 129 | 113 | 101 | 85 | 75 | 60 | 47 | 17 | 3 | 0 | 0 |



垂中心距离 (mm) vertical central distance(mm)
喷水量沿宽度方向分布 spary water along the direction of horizontal axis



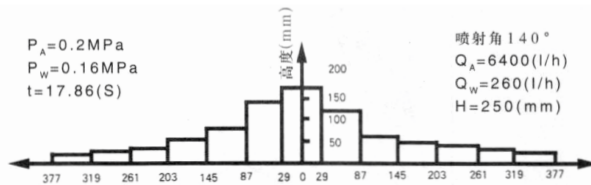
流量特性曲线 flow characteristic curve

| 型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | 喷射角 (°) Spray angle (degree) | 雾滴尺寸 (μm) Droplet size (μm) | 外形及尺寸 Outline and size |
|-------------|------------------------------------|------------------------------|-----------------------------|----------------------------------|------------------------------|-----------------------------|----------------------------------|------------------------------|-----------------------------|--|--------------------------------------|---------------------------|
| | 0.2 | | | 0.25 | | | 0.3 | | | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m³/h) | | | |
| HPZ6-150B1 | 0.14 | 230 | 8.7 | 0.16 | 230 | 9.8 | 0.20 | 240 | 10.3 | 150 | 73.86 | |
| | 0.16 | 260 | 8.2 | 0.18 | 250 | 9.2 | 0.22 | 270 | 10.0 | | | |
| | 0.18 | 310 | 7.7 | 0.20 | 290 | 8.8 | 0.24 | 310 | 9.7 | | | |
| | 0.20 | 360 | 7.0 | 0.22 | 330 | 8.3 | 0.28 | 380 | 9.0 | | | |
| | | | | 0.25 | 390 | 8.0 | 0.30 | 420 | 8.2 | | | |

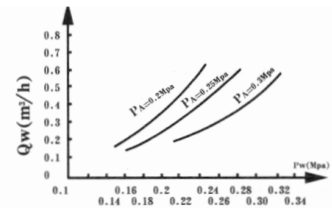
说明: Explanation:

- 表中的雾滴尺寸为 $Rwa=20$ 时的平均体面积直径 ($S \cdot M \cdot D$)。以下各表均相同。
- 气—水雾化喷嘴的材质: HPb59-1; 1Cr18Ni9Ti; H62。
- 喷嘴总长可根据用户需求给定, 以下各规格喷嘴均有此意, 不再一一说明。

- The size of droplet in the table is the diameter ($S.M.D$) of average area as $Rwa=20$, and same in the following tables.
- The material of air-water atomizing nozzle: HPb59-1; 1Cr18Ni9Ti; H62;
- The total length of nozzle can be designed according to the demand of users. The following nozzles with various specifications will be the same situation.

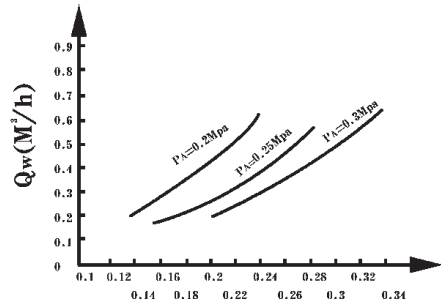
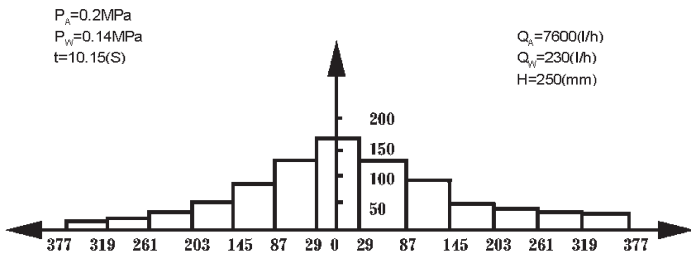


垂中心距离 (mm) vertical central distance(mm)
喷水量沿宽度方向分布 spary water in the direction of horizontal axis

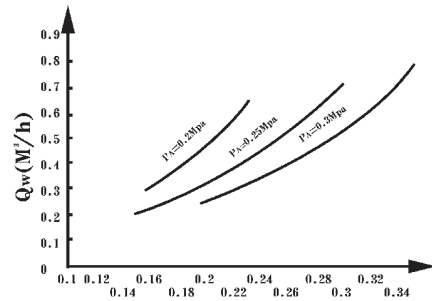
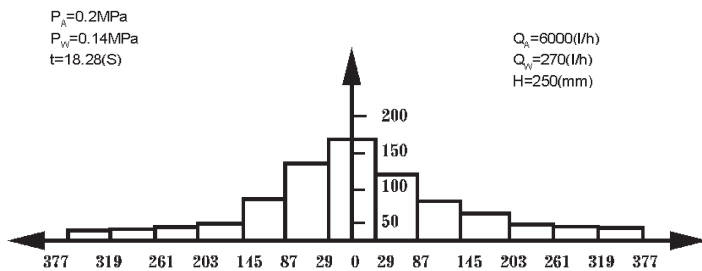


流量特性曲线 flow characteristic curve

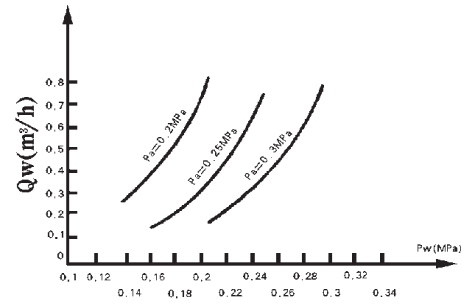
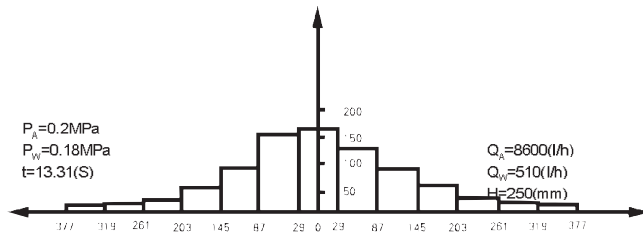
| 型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | 喷射角 (°) Spray angle (degree) | 雾滴尺寸 (μm) Droplet size (μm) | 外形及尺寸 Outline and size |
|-------------|------------------------------------|------------------------------|-----------------------------|----------------------------------|------------------------------|-----------------------------|----------------------------------|------------------------------|-----------------------------|--|--------------------------------------|---------------------------|
| | 0.2 | | | 0.25 | | | 0.3 | | | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m³/h) | | | |
| HPZ7-140B1 | 0.14 | 210 | 7.8 | 0.16 | 190 | 9.2 | 0.22 | 240 | 9.4 | 140 | 73.86 | |
| | 0.16 | 260 | 6.4 | 0.18 | 250 | 8.3 | 0.24 | 290 | 8.9 | | | |
| | 0.18 | 330 | 5.4 | 0.20 | 310 | 6.6 | 0.28 | 400 | 6.6 | | | |
| | 0.20 | 420 | 4.4 | 0.22 | 360 | 5.8 | 0.30 | 480 | 5.8 | | | |
| | 0.23 | 570 | 3.7 | 0.25 | 500 | 4.5 | 0.33 | 620 | 4.4 | | | |



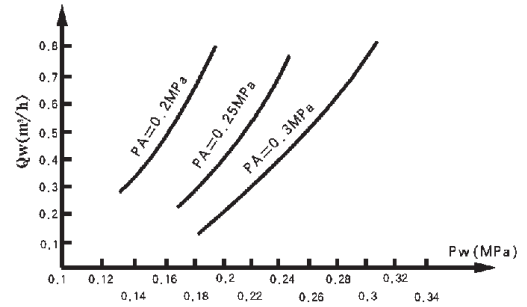
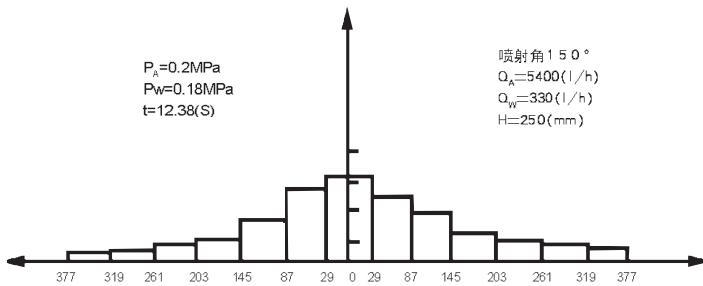
| 型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | 喷射角 (°) Spray angle (degree) | 雾滴尺寸 (μm) Droplet size (μm) | 外形及尺寸 Outline and size |
|--------------|------------------------------------|------------------------------|-----------------------------|----------------------------------|------------------------------|-----------------------------|----------------------------------|------------------------------|-----------------------------|--|--------------------------------------|---------------------------|
| | 0.2 | | | 0.25 | | | 0.3 | | | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m³/h) | | | |
| HPZ7.8-105B1 | 0.14 | 230 | 7.6 | 0.16 | 180 | 9.8 | 0.22 | 270 | 9.2 | 105 | 87.72 | |
| | 0.16 | 260 | 6.4 | 0.18 | 240 | 9.1 | 0.24 | 320 | 8.1 | | | |
| | 0.18 | 360 | 5.4 | 0.20 | 280 | 8.3 | 0.28 | 450 | 6.3 | | | |
| | 0.20 | 470 | 4.3 | 0.22 | 330 | 7.4 | 0.30 | 530 | 5.4 | | | |
| | 0.23 | 600 | 2.7 | 0.25 | 430 | 5.6 | 0.33 | 640 | 4.2 | | | |



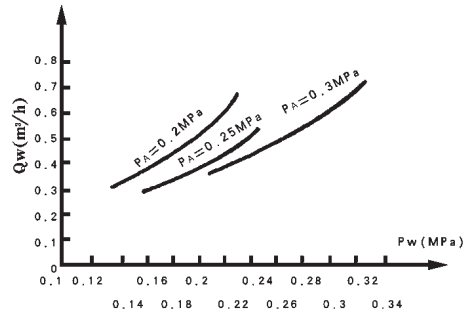
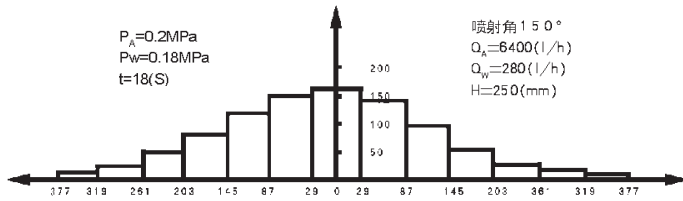
| 型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | 喷射角 (°) Spray angle (degree) | 雾滴尺寸 (μm) Droplet size (μm) | 外形及尺寸 Outline and size |
|--------------|------------------------------------|------------------------------|-----------------------------|----------------------------------|------------------------------|-----------------------------|----------------------------------|------------------------------|-----------------------------|--|--------------------------------------|---------------------------|
| | 0.2 | | | 0.25 | | | 0.3 | | | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m³/h) | | | |
| HPZ8.2-150B1 | 0.14 | 270 | 6.0 | 0.16 | 250 | 7.4 | 0.20 | 270 | 7.8 | 150 | 61.11 | |
| | 0.16 | 330 | 5.3 | 0.18 | 300 | 6.8 | 0.22 | 330 | 7.5 | | | |
| | 0.18 | 400 | 4.6 | 0.20 | 360 | 6.2 | 0.24 | 370 | 7.0 | | | |
| | 0.20 | 490 | 4.0 | 0.22 | 400 | 5.4 | 0.28 | 480 | 5.5 | | | |
| | 0.23 | 630 | 2.7 | 0.25 | 520 | 4.5 | 0.30 | 530 | 4.5 | | | |



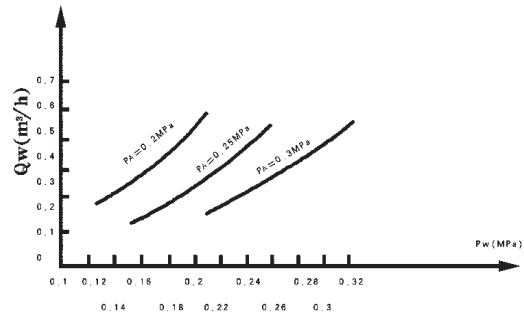
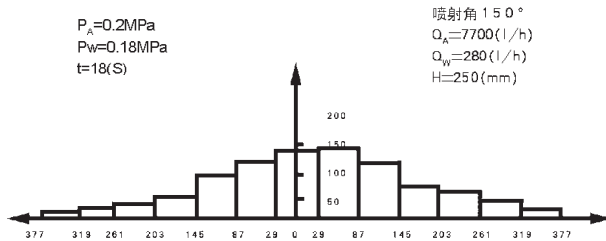
| 型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | 喷射角 (°) Spray angle (degree) | 雾滴尺寸 (μm) Droplet size (μm) | 外形及尺寸 Outline and size |
|-------------|--------------------------------------|----------------------------------|--|--------------------------------------|---------------------------------|--|--------------------------------------|---------------------------------|--|---------------------------------------|--|---------------------------|
| | 0.2 | | | 0.25 | | | 0.3 | | | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m^3/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m^3/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m^3/h) | | | |
| Z125-140B1 | 0.14 0.16 0.18 0.20 0.23 | 260 370 510 750 1000 | 13.7 11.0 8.6 5.7 2.0 | 0.16 0.18 0.20 0.22 0.25 | 140 200 290 390 740 | 18.9 17.6 15.0 12.0 7.0 | 0.22 0.24 0.25 0.28 0.30 | 230 330 380 610 910 | 18.2 15.7 14.4 10.4 6.1 | 140 | 76.95 | |



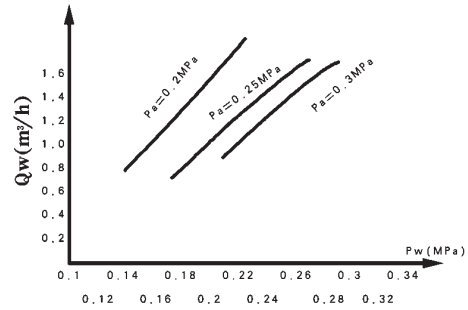
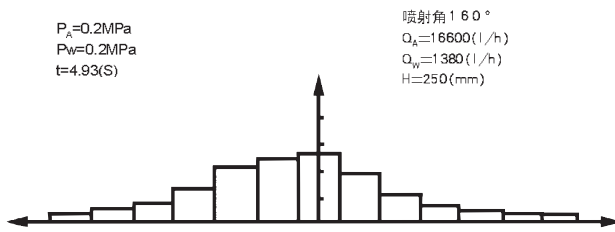
| 型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | 喷射角 (°) Spray angle (degree) | 雾滴尺寸 (μm) Droplet size (μm) | 外形及尺寸 Outline and size |
|-------------|--------------------------------------|---------------------------------|--|--|--|--|--------------------------------------|---------------------------------|--|---------------------------------------|--|---------------------------|
| | 0.2 | | | 0.25 | | | 0.3 | | | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m^3/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m^3/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m^3/h) | | | |
| HPZ7-150B1 | 0.14 0.16 0.18 0.20 0.23 | 210 260 330 420 570 | 7.8 6.4 5.4 4.4 3.7 | 0.16 0.18 0.20 0.22 0.25 0.28 | 190 250 310 360 500 620 | 9.2 8.3 6.6 5.8 4.5 3.7 | 0.22 0.24 0.28 0.30 0.33 | 240 290 400 480 620 | 9.4 8.9 6.6 5.8 4.4 | 150 | 62.76 | |



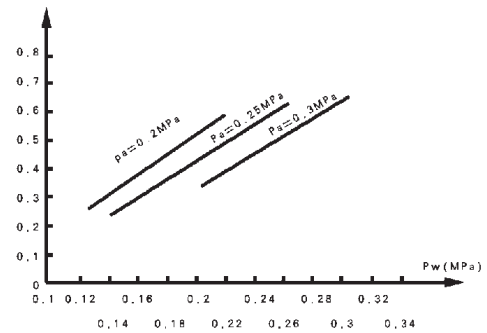
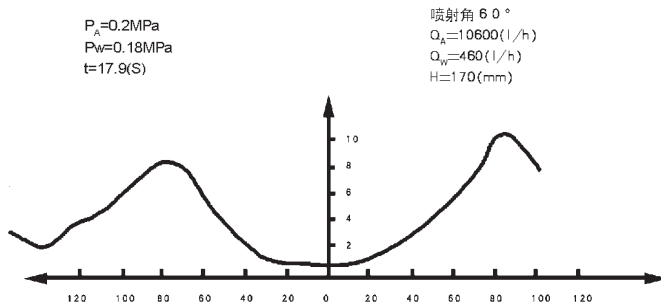
| 型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | 喷射角 (°) Spray angle (degree) | 雾滴尺寸 (μm) Droplet size (μm) | 外形及尺寸 Outline and size |
|--------------|------------------------------------|---------------------------|--------------------------|-------------------------------|---------------------------|--------------------------|-------------------------------|---------------------------|--------------------------|---------------------------------------|--------------------------------------|---------------------------|
| | 0.2 | | | 0.25 | | | 0.3 | | | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m³/h) | | | |
| HPZ7.8-150B1 | 0.14 | 230 | 7.6 | 0.16 | 180 | 9.8 | 0.22 | 270 | 9.2 | 150 | 74.79 | |
| | 0.16 | 280 | 6.4 | 0.18 | 240 | 9.1 | 0.24 | 320 | 8.1 | | | |
| | 0.18 | 360 | 5.4 | 0.20 | 280 | 8.3 | 0.28 | 450 | 6.3 | | | |
| | 0.20 | 470 | 4.3 | 0.22 | 330 | 7.4 | 0.30 | 530 | 5.4 | | | |
| | 0.23 | 600 | 2.7 | 0.25 | 430 | 5.6 | 0.33 | 640 | 4.2 | | | |



| 型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | 喷射角 (°) Spray angle (degree) | 雾滴尺寸 (μm) Droplet size (μm) | 外形及尺寸 Outline and size |
|--------------|------------------------------------|---------------------------|--------------------------|-------------------------------|---------------------------|--------------------------|-------------------------------|---------------------------|--------------------------|---------------------------------------|--------------------------------------|---------------------------|
| | 0.2 | | | 0.25 | | | 0.3 | | | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m³/h) | | | |
| HPZ5.8-150B1 | 0.14 | 230 | 8.7 | 0.16 | 230 | 9.8 | 0.2 | 240 | 10.3 | 150 | 76.95 | |
| | 0.16 | 260 | 8.2 | 0.18 | 250 | 9.2 | 0.22 | 270 | 10 | | | |
| | 0.18 | 300 | 7.7 | 0.20 | 290 | 8.8 | 0.24 | 310 | 9.7 | | | |
| | 0.22 | 330 | 7.0 | 0.22 | 330 | 8.3 | 0.28 | 380 | 9.0 | | | |
| | 0.25 | 390 | 8.0 | 0.30 | 420 | 8.2 | | | | | | |



| 型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | 喷射角 ($^\circ$) Spray angle (degree) | 雾滴尺寸 (μm) Droplet size (μm) | 外形及尺寸 Outline and size |
|-------------|------------------------------------|------------------------------|--|----------------------------------|------------------------------|--|----------------------------------|------------------------------|--|--|--|---------------------------|
| | 0.2 | | | 0.25 | | | 0.3 | | | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m^3/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m^3/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m^3/h) | | | |
| HPZ23-160B1 | 0.14 | 720 | 26.6 | 0.18 | 710 | 31.5 | 0.22 | 830 | 32.4 | 160 | 81.95 | |
| | 0.16 | 900 | 23.3 | 0.20 | 880 | 28.4 | 0.24 | 1100 | 30.2 | | | |
| | 0.18 | 1110 | 19.9 | 0.22 | 1080 | 24.5 | 0.25 | 1140 | 26.8 | | | |
| | 0.20 | 1380 | 16.6 | 0.25 | 1340 | 21.3 | 0.28 | 1380 | 23.7 | | | |
| | 0.23 | 1690 | 12.8 | 0.28 | 1530 | 19.8 | 0.30 | 1510 | 21.2 | | | |

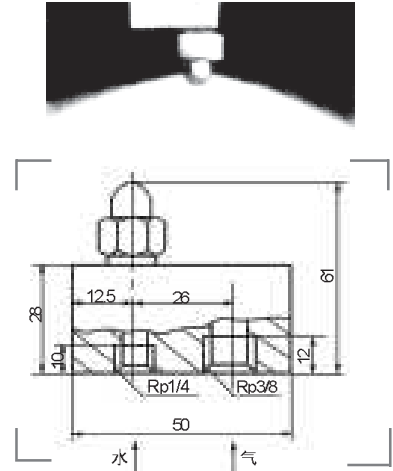


| 型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | 喷射角 ($^\circ$) Spray angle (degree) | 雾滴尺寸 (μm) Droplet size (μm) | 外形及尺寸 Outline and size |
|-------------|------------------------------------|------------------------------|--|----------------------------------|------------------------------|--|----------------------------------|------------------------------|--|--|--|---------------------------|
| | 0.2 | | | 0.25 | | | 0.3 | | | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m^3/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m^3/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/h) | 气量 Air flow (m^3/h) | | | |
| HPZ9-60QZ1 | 0.14 | 320 | 12.7 | 0.16 | 310 | 14.2 | 0.20 | 340 | 15.0 | 60 | 50.24 | |
| | 0.16 | 390 | 11.7 | 0.18 | 370 | 13.9 | 0.22 | 400 | 14.6 | | | |
| | 0.18 | 460 | 10.6 | 0.20 | 430 | 12.7 | 0.24 | 450 | 13.8 | | | |
| | 0.20 | 540 | 9.3 | 0.22 | 490 | 11.8 | 0.28 | 570 | 11.8 | | | |
| | | | | 0.25 | 590 | 10.0 | 0.30 | 640 | 11.0 | | | |

喷雾特性及用途:

该喷嘴属气、水混合型喷嘴，其喷淋形式为扁平状，雾化均匀，粒子较小，扩散角较大；因而，特别适用于板坯连铸二次冷却和超低头连铸机的二次冷却，以及纺织品的湿润。

The nozzle is of water and air mixed nozzle. Its spray pattern is in flat shape. It has the even atomization, small particle and large spreading angle. therefore it is especially suitable for the secondary cooling of slab continuous casting machine and of continuous casting machine for extra-low-head and for moisturizing of textiles.



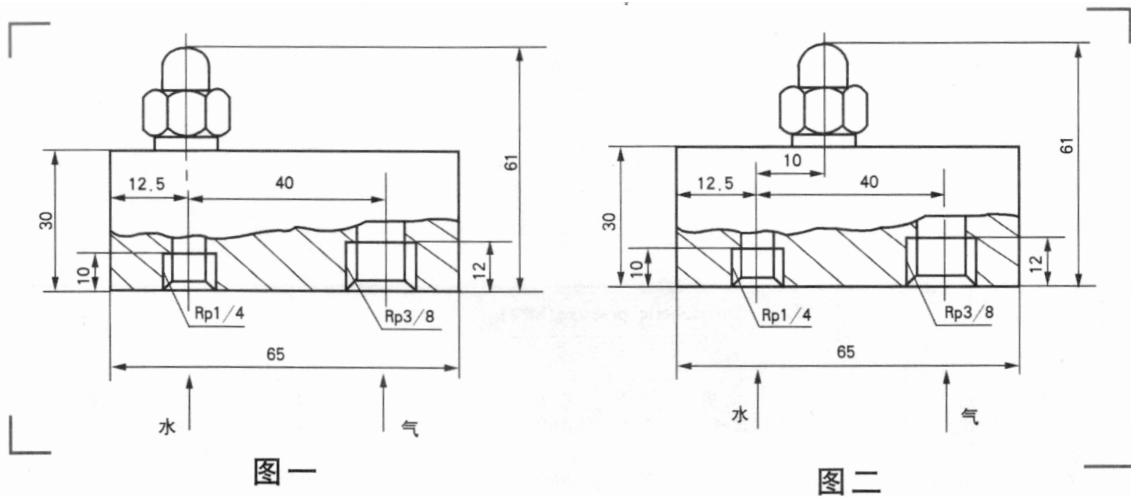
| 产品型号 Model | 气压 (MPa) Atmospheric pressure (MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|---------------|-------------------------------------|-----------------------------|--------------------------|-------------------------------|-----------------------------|--------------------------|-------------------------------|-----------------------------|--------------------------|-------------------------------|-----------------------------|--------------------------|---------------------------------------|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | |
| HPZ1.6-30B2 | 0.1 | 0.6 | 15.0 | 0.1 | 0.5 | 19.0 | 0.1 | 0.4 | 23.0 | 0.16 | 0.6 | 27.0 | 30 |
| | 0.2 | 1.8 | 14.0 | 0.2 | 1.6 | 18.0 | 0.2 | 1.4 | 22.0 | 0.2 | 1.1 | 26.0 | |
| | 0.3 | 2.5 | 13.8 | 0.3 | 2.3 | 17.5 | 0.3 | 2.2 | 21.8 | 0.3 | 1.95 | 25.0 | |
| | 0.4 | 3.1 | 13.1 | 0.4 | 2.9 | 17.0 | 0.4 | 2.8 | 21.6 | 0.4 | 2.6 | 24.8 | |
| | 0.5 | 3.5 | 13.0 | 0.5 | 3.3 | 16.8 | 0.5 | 3.25 | 21.5 | 0.5 | 3.1 | 24.3 | |
| | 0.6 | 3.9 | 12.8 | 0.6 | 3.7 | 16.5 | 0.6 | 3.6 | 21.0 | 0.6 | 3.5 | 24.0 | |
| | 0.7 | 4.2 | 12.6 | 0.7 | 4.1 | 16.3 | 0.7 | 4.0 | 20.2 | 0.7 | 3.8 | 23.5 | |
| HPZ2.3-30B2 | 0.12 | 1.1 | 9.5 | 0.14 | 0.6 | 13.5 | 0.17 | 0.4 | 16.0 | | | | 30 |
| | 0.2 | 2.8 | 6.8 | 0.2 | 2.3 | 10.0 | 0.2 | 1.2 | 14.5 | 0.2 | 0.4 | 18.0 | |
| | 0.3 | 4.2 | 4.8 | 0.3 | 3.7 | 7.3 | 0.3 | 3.1 | 10.7 | 0.3 | 2.4 | 14.0 | |
| | 0.4 | 5.4 | 3.8 | 0.4 | 4.9 | 5.8 | 0.4 | 4.3 | 8.4 | 0.4 | 3.8 | 11.0 | |
| | 0.5 | 6.3 | 3.0 | 0.5 | 5.9 | 4.8 | 0.5 | 5.4 | 6.7 | 0.5 | 5.0 | 9.2 | |
| | 0.6 | 7.2 | 2.6 | 0.6 | 6.6 | 4.2 | 0.6 | 6.3 | 5.7 | 0.6 | 6.0 | 7.7 | |
| | 0.7 | 7.8 | 2.3 | 0.7 | 7.5 | 3.6 | 0.7 | 7.3 | 5.0 | 0.7 | 7.0 | 6.6 | |
| HPZ2.3-60B2 | 0.12 | 1.4 | 10.0 | 0.13 | 0.8 | 14.0 | 0.16 | 0.6 | 16.6 | 0.19 | 0.5 | 18.5 | 60 |
| | 0.2 | 3.0 | 8.0 | 0.2 | 2.3 | 11.0 | 0.2 | 1.6 | 14.9 | 0.2 | 0.8 | 18.0 | |
| | 0.3 | 4.4 | 6.1 | 0.3 | 3.9 | 9.0 | 0.3 | 3.4 | 12.0 | 0.3 | 2.7 | 15.2 | |
| | 0.4 | 5.5 | 4.8 | 0.4 | 5.2 | 7.3 | 0.4 | 4.6 | 10.0 | 0.4 | 4.0 | 13.0 | |
| | 0.5 | 6.5 | 3.9 | 0.5 | 6.0 | 6.0 | 0.5 | 5.6 | 8.3 | 0.5 | 5.2 | 11.0 | |
| | 0.6 | 7.4 | 3.4 | 0.6 | 7.0 | 5.1 | 0.6 | 6.5 | 7.0 | 0.6 | 6.2 | 9.5 | |
| | 0.7 | 8.0 | 2.9 | 0.7 | 7.7 | 4.7 | 0.7 | 7.4 | 6.3 | 0.7 | 7.2 | 8.3 | |
| HPZ2-90B2 | 0.12 | 1.1 | 9.0 | 0.17 | 1.3 | 11.0 | | | | | | | 90 |
| | 0.2 | 2.8 | 5.7 | 0.2 | 2.0 | 9.5 | 0.2 | 1.1 | 13.8 | 0.25 | 1.4 | 15.0 | |
| | 0.3 | 4.2 | 4.1 | 0.3 | 3.6 | 6.8 | 0.3 | 3.0 | 9.5 | 0.3 | 2.3 | 13.0 | |
| | 0.4 | 5.4 | 3.2 | 0.4 | 4.9 | 5.2 | 0.4 | 4.5 | 7.3 | 0.4 | 3.9 | 10.0 | |
| | 0.5 | 6.5 | 2.6 | 0.5 | 5.9 | 4.3 | 0.5 | 5.6 | 6.0 | 0.5 | 5.2 | 8.1 | |
| | 0.6 | 7.3 | 2.3 | 0.6 | 6.7 | 3.7 | 0.6 | 6.5 | 5.2 | 0.6 | 6.2 | 6.8 | |
| | 0.7 | 8.0 | 2.0 | 0.7 | 7.7 | 3.1 | 0.7 | 7.4 | 4.4 | 0.7 | 7.0 | 6.1 | |

| 产品型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|---------------|------------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|--|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | |
| HPZ0.11-120B2 | 0.20 | 0.14 | 5.0 | 0.20 | 0.11 | 6.2 | 0.2 | 0.08 | 7.4 | | | | 120 |
| | 0.25 | 0.17 | 4.9 | 0.25 | 0.15 | 6.1 | 0.25 | 0.12 | 7.3 | 0.25 | 0.09 | 8.7 | |
| | | | | 0.30 | 0.18 | 6.0 | 0.30 | 0.15 | 7.2 | 0.30 | 0.13 | 8.4 | |
| | | | | 0.35 | 0.20 | 5.9 | 0.35 | 0.18 | 7.1 | 0.35 | 0.16 | 8.3 | |
| HPZ0.18-120B2 | 0.20 | 0.31 | 3.9 | 0.2 | 0.18 | 5.4 | 0.25 | 0.22 | 6.3 | 0.3 | 0.23 | 7.2 | 120 |
| | | | | 0.25 | 0.31 | 4.9 | 0.3 | 0.32 | 5.8 | 0.35 | 0.33 | 6.8 | |
| | | | | 0.30 | 0.39 | 4.6 | 0.35 | 0.40 | 5.7 | 0.40 | 0.40 | 6.4 | |
| HPZ1.7-140B2 | 0.08 | 0.55 | 15.0 | 0.1 | 0.5 | 19.5 | 0.12 | 0.4 | 24.0 | 0.14 | 0.34 | 26.4 | 140 |
| | 0.2 | 1.9 | 14.0 | 0.2 | 1.7 | 18.0 | 0.2 | 1.3 | 22.0 | 0.2 | 1.15 | 25.0 | |
| | 0.3 | 2.6 | 13.5 | 0.3 | 2.3 | 17.0 | 0.3 | 2.1 | 21.5 | 0.3 | 1.9 | 24.2 | |
| | 0.4 | 3.1 | 13.3 | 0.4 | 2.9 | 16.8 | 0.4 | 2.7 | 20.5 | 0.4 | 2.5 | 24.0 | |
| | 0.5 | 3.6 | 13.1 | 0.5 | 3.3 | 16.5 | 0.5 | 3.2 | 20.0 | 0.5 | 3.0 | 23.8 | |
| | 0.6 | 3.9 | 13.0 | 0.6 | 3.6 | 16.3 | 0.6 | 3.6 | 19.5 | 0.6 | 3.4 | 23.5 | |
| | 0.7 | 4.3 | 12.9 | 0.7 | 4.1 | 16.0 | 0.7 | 3.9 | 19.2 | 0.7 | 3.8 | 23.0 | |
| HPZ2-140B2 | 0.12 | 0.9 | 9.5 | 0.15 | 0.8 | 12.5 | 0.18 | 0.7 | 15.0 | | | | 140 |
| | 0.2 | 2.8 | 6.8 | 0.2 | 2.0 | 11.0 | 0.2 | 1.1 | 13.5 | 0.21 | 0.6 | 17.3 | |
| | 0.3 | 4.2 | 4.9 | 0.3 | 3.5 | 7.6 | 0.3 | 3.0 | 10.2 | 0.3 | 2.4 | 13.5 | |
| | 0.4 | 5.3 | 3.7 | 0.4 | 4.9 | 5.8 | 0.4 | 4.4 | 8.2 | 0.4 | 3.8 | 10.8 | |
| | 0.5 | 6.2 | 2.8 | 0.5 | 5.8 | 4.6 | 0.5 | 5.5 | 6.6 | 0.5 | 5.0 | 9.0 | |
| | 0.6 | 7.0 | 2.3 | 0.6 | 6.7 | 3.8 | 0.6 | 6.4 | 5.4 | 0.6 | 6.0 | 7.5 | |
| | 0.7 | 7.8 | 1.75 | 0.7 | 7.4 | 3.3 | 0.7 | 6.9 | 4.8 | 0.7 | 6.6 | 6.3 | |
| HPZ3.8-140B2 | 0.1 | 0.75 | 18.5 | 0.14 | 1.2 | 20.9 | 0.18 | 1.2 | 26.0 | | | | 140 |
| | 0.2 | 6.2 | 9.5 | 0.2 | 3.8 | 15.0 | 0.2 | 2.1 | 21.5 | 0.2 | 0.9 | 31.0 | |
| | 0.3 | 10.0 | 6.0 | 0.3 | 8.5 | 10.0 | 0.3 | 6.8 | 15.0 | 0.3 | 4.8 | 22.0 | |
| | 0.4 | 12.9 | 4.0 | 0.4 | 11.1 | 7.3 | 0.4 | 10.0 | 11.0 | 0.4 | 8.3 | 18.0 | |
| | 0.5 | 15.0 | 2.9 | 0.5 | 14.0 | 5.5 | 0.5 | 13.0 | 8.5 | 0.5 | 11.5 | 12.0 | |
| | 0.6 | 17.0 | 2.2 | 0.6 | 16.0 | 4.4 | 0.6 | 15.0 | 6.5 | 0.6 | 14.0 | 9.7 | |
| | 0.7 | 19.0 | 1.6 | 0.7 | 18.0 | 3.5 | 0.7 | 17.6 | 5.3 | 0.7 | 16.0 | 7.5 | |
| HPZ6.3-140B2 | 0.1 | 2.0 | 25.0 | 0.12 | 1.9 | 32.0 | 0.15 | 1.8 | 35.0 | | | | 140 |
| | 0.2 | 9.3 | 18.0 | 0.2 | 6.3 | 23.0 | 0.2 | 4.9 | 32.0 | 0.2 | 2.9 | 39.0 | |
| | 0.3 | 13.5 | 15.5 | 0.3 | 12.0 | 19.0 | 0.3 | 10.0 | 26.0 | 0.3 | 7.8 | 34.0 | |
| | 0.4 | 17.0 | 14.0 | 0.4 | 15.8 | 18.5 | 0.4 | 14.0 | 22.0 | 0.4 | 12.8 | 28.0 | |
| | 0.5 | 20.0 | 13.0 | 0.5 | 18.5 | 16.5 | 0.5 | 18.5 | 21.8 | 0.5 | 16.5 | 26.3 | |
| | 0.6 | 22.0 | 12.5 | 0.6 | 21.0 | 16.3 | 0.6 | 19.0 | 21.6 | 0.6 | 19.0 | 25.0 | |
| | 0.7 | 24.2 | 12.0 | 0.7 | 23.2 | 16.0 | 0.7 | 20.0 | 21.5 | 0.7 | 20.0 | 24.0 | |
| HPZ7-140B2 | | | | 0.13 | 0.55 | 52.0 | 0.17 | 0.75 | 62.0 | | | | 140 |
| | | | | 0.2 | 7.0 | 33.0 | 0.2 | 3.6 | 51.0 | 0.2 | 0.45 | 73.0 | |
| | | | | 0.3 | 14.0 | 28.0 | 0.3 | 11.0 | 37.0 | 0.3 | 7.5 | 50.0 | |
| | | | | 0.4 | 19.0 | 21.0 | 0.4 | 16.0 | 30.0 | 0.4 | 14.0 | 39.0 | |
| | | | | 0.5 | 23.0 | 18.0 | 0.5 | 20.0 | 25.0 | 0.5 | 19.0 | 33.0 | |
| | | | | 0.6 | 25.0 | 17.0 | 0.6 | 24.0 | 23.0 | 0.6 | 22.0 | 29.0 | |
| HPZ8.5-140B2 | | | | 0.7 | 27.0 | 15.0 | 0.7 | 27.0 | 21.0 | 0.7 | 25.0 | 26.0 | 140 |
| | | | | 0.11 | 0.6 | 75.0 | 0.15 | 0.9 | 80.0 | 0.18 | 1.2 | 95.0 | |
| | | | | 0.2 | 8.5 | 54.0 | 0.2 | 5.4 | 70.0 | 0.2 | 2.9 | 86.0 | |
| | | | | 0.3 | 15.0 | 47.0 | 0.3 | 12.5 | 60.0 | 0.3 | 9.7 | 73.0 | |
| | | | | 0.4 | 19.5 | 44.0 | 0.4 | 17.1 | 54.0 | 0.4 | 15.5 | 65.0 | |
| | | | | 0.5 | 21.0 | 42.0 | 0.5 | 20.5 | 51.0 | 0.5 | 20.0 | 62.0 | |
| | | | 0.6 | 25.0 | 40.0 | 0.6 | 24.0 | 49.0 | 0.6 | 21.2 | 59.0 | | |
| | | | 0.7 | 28.0 | 39.0 | 0.7 | 27.0 | 48.0 | 0.7 | 25.7 | 57.0 | | |

| 产品型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|---------------|------------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|--|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | |
| HPZ1.1-75B2 | 0.1 | 0.9 | 4.5 | 0.15 | 0.9 | 5.3 | 0.2 | 1.0 | 6.2 | 0.25 | 1.2 | 6.8 | 75 |
| | 0.2 | 1.4 | 4.3 | 0.2 | 1.1 | 5.0 | 0.3 | 1.4 | 6.1 | 0.3 | 1.4 | 6.6 | |
| | 0.3 | 1.7 | 4.0 | 0.3 | 1.5 | 4.8 | 0.4 | 1.8 | 5.8 | 0.4 | 1.7 | 6.4 | |
| | 0.4 | 2.1 | 3.8 | 0.4 | 1.9 | 4.7 | 0.5 | 2.2 | 5.4 | 0.5 | 2.0 | 6.2 | |
| HPZ1.7-100B2 | 0.15 | 1.6 | 3.9 | 0.2 | 1.7 | 4.8 | 0.2 | 1.0 | 7.0 | 0.3 | 2.0 | 6.2 | 100 |
| | 0.2 | 2.4 | 3.6 | 0.3 | 3.1 | 3.9 | 0.3 | 2.5 | 4.9 | 0.4 | 3.2 | 5.2 | |
| | 0.3 | 3.6 | 3.0 | 0.4 | 4.2 | 3.4 | 0.4 | 3.7 | 4.2 | 0.5 | 4.3 | 4.9 | |
| | 0.4 | 4.6 | 2.5 | 0.5 | 5.0 | 3.2 | 0.5 | 4.7 | 3.8 | 0.6 | 5.1 | 4.5 | |
| HPZ3.8-90B2 | 0.1 | 0.75 | 18.5 | 0.15 | 1.3 | 20.9 | 0.2 | 2.1 | 21.5 | 0.25 | 3.1 | 24.0 | 90 |
| | 0.2 | 6.2 | 9.5 | 0.2 | 3.8 | 15.0 | 0.3 | 6.8 | 15.0 | 0.3 | 4.8 | 22.0 | |
| | 0.3 | 10.0 | 6.0 | 0.3 | 8.5 | 10.0 | 0.4 | 10.0 | 11.0 | 0.4 | 8.3 | 18.0 | |
| | 0.4 | 12.9 | 4.0 | 0.4 | 11.1 | 7.3 | 0.5 | 13.0 | 8.5 | 0.5 | 11.5 | 12.0 | |
| HPZ3.8-100B2 | 0.1 | 0.75 | 18.5 | 0.15 | 1.3 | 20.9 | 0.2 | 2.1 | 21.5 | 0.25 | 3.1 | 24.0 | 100 |
| | 0.2 | 6.2 | 9.5 | 0.2 | 3.8 | 15.0 | 0.3 | 6.8 | 15.0 | 0.3 | 4.8 | 22.0 | |
| | 0.3 | 10.0 | 6.0 | 0.3 | 8.5 | 10.0 | 0.4 | 10.0 | 11.0 | 0.4 | 8.3 | 18.0 | |
| | 0.4 | 12.9 | 4.0 | 0.4 | 11.1 | 7.3 | 0.5 | 13.0 | 8.5 | 0.5 | 11.5 | 12.0 | |
| HPZ6.3-120B2 | 0.1 | 1.9 | 12.8 | 0.15 | 3.1 | 14.4 | 0.2 | 3.9 | 15.8 | 0.3 | 7.2 | 14.7 | 120 |
| | 0.2 | 8.7 | 7.6 | 0.2 | 6.3 | 11.1 | 0.3 | 9.3 | 11.1 | 0.4 | 12.1 | 11.4 | |
| | 0.3 | 13.7 | 4.7 | 0.3 | 11.7 | 7.2 | 0.4 | 14.0 | 7.7 | 0.5 | 16.0 | 9.5 | |
| | 0.4 | 17.3 | 3.7 | 0.4 | 15.6 | 5.6 | 0.5 | 17.6 | 6.2 | 0.6 | 19.5 | 8.2 | |
| HPZ5.0-120B2 | 0.15 | 4.4 | 9.2 | 0.2 | 5.0 | 11.6 | 0.2 | 1.8 | 20.9 | 0.25 | 2.6 | 22.2 | 120 |
| | 0.2 | 7.9 | 5.5 | 0.3 | 11.2 | 5.2 | 0.25 | 5.5 | 14.0 | 0.3 | 5.7 | 16.2 | |
| | 0.25 | 11.1 | 3.3 | 0.4 | 15.6 | 2.9 | 0.3 | 8.4 | 9.3 | 0.4 | 11.3 | 10.8 | |
| | | | | | | | 0.4 | 13.4 | 6.4 | 0.5 | 15.3 | 7.3 | |

注：用户对性能参数及结构尺寸有特殊要求，订货时请注明。

Note: If users have special requirements for the performance parameters, structure and size, please specify in ordering.



| 产品型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) | 备注 Remark |
|----------------|------------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|--|--------------|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | | |
| HPZ2.1-120B2 | 0.15 | 1.7 | 3.5 | 0.2 | 2.1 | 4.5 | 0.25 | 2.1 | 5.5 | 0.3 | 2.3 | 6.4 | 120 | 图一 |
| | 0.2 | 2.9 | 3.0 | 0.3 | 3.9 | 3.6 | 0.3 | 3.1 | 4.9 | 0.4 | 4 | 5.3 | | |
| | 0.3 | 4.5 | 2.2 | 0.4 | 5.2 | 2.8 | 0.4 | 4.6 | 4.2 | 0.5 | 5.2 | 4.8 | | |
| | 0.4 | 5.7 | 1.6 | 0.5 | 6.2 | 2.2 | 0.5 | 5.8 | 3.5 | 0.6 | 6.3 | 4.2 | | |
| HPZ2.1-102B2-B | 0.15 | 1.7 | 3.5 | 0.2 | 2.1 | 4.5 | 0.25 | 2.1 | 5.5 | 0.3 | 2.3 | 6.4 | 102 | 图二 |
| | 0.2 | 2.9 | 3.0 | 0.3 | 3.9 | 3.6 | 0.3 | 3.1 | 4.9 | 0.4 | 4 | 5.3 | | |
| | 0.3 | 4.5 | 2.2 | 0.4 | 5.2 | 2.8 | 0.4 | 4.6 | 4.2 | 0.5 | 5.2 | 4.8 | | |
| | 0.4 | 5.7 | 1.6 | 0.5 | 6.2 | 2.2 | 0.5 | 5.8 | 3.5 | 0.6 | 6.3 | 4.2 | | |
| HPZ2.1-120B2-B | 0.15 | 1.7 | 3.5 | 0.2 | 2.1 | 4.5 | 0.25 | 2.1 | 5.5 | 0.3 | 2.3 | 6.4 | 120 | 图二 |
| | 0.2 | 2.9 | 3.0 | 0.3 | 3.9 | 3.6 | 0.3 | 3.1 | 4.9 | 0.4 | 4 | 5.3 | | |
| | 0.3 | 4.5 | 2.2 | 0.4 | 5.2 | 2.8 | 0.4 | 4.6 | 4.2 | 0.5 | 5.2 | 4.8 | | |
| | 0.4 | 5.7 | 1.6 | 0.5 | 6.2 | 2.2 | 0.5 | 5.8 | 3.5 | 0.6 | 6.3 | 4.2 | | |
| HPZ7.3-120B2 | 0.1 | 2.7 | 9.1 | 0.15 | 3.8 | 11.0 | 0.2 | 4.8 | 12.5 | 0.25 | 5.5 | 14.0 | 120 | 图一 |
| | 0.15 | 6.6 | 6.3 | 0.2 | 7.3 | 8.1 | 0.25 | 8.0 | 9.4 | 0.3 | 8.7 | 11.2 | | |
| | 0.2 | 10.3 | 4.9 | 0.3 | 13.4 | 5.3 | 0.3 | 11.3 | 7.6 | 0.4 | 14.3 | 8.2 | | |
| | 0.3 | 15.6 | 3.1 | 0.4 | 18.1 | 3.8 | 0.4 | 16.0 | 5.9 | 0.5 | 18.4 | 6.4 | | |
| HPZ7.3-102B2-B | 0.1 | 2.7 | 9.1 | 0.15 | 3.8 | 11.0 | 0.2 | 4.8 | 12.5 | 0.25 | 5.5 | 14.0 | 102 | 图二 |
| | 0.15 | 6.6 | 6.3 | 0.2 | 7.3 | 8.1 | 0.25 | 8.0 | 9.4 | 0.3 | 8.7 | 11.2 | | |
| | 0.2 | 10.3 | 4.9 | 0.3 | 13.4 | 5.3 | 0.3 | 11.3 | 7.6 | 0.4 | 14.3 | 8.2 | | |
| | 0.3 | 15.6 | 3.1 | 0.4 | 18.1 | 3.8 | 0.4 | 16.0 | 5.9 | 0.5 | 18.4 | 6.4 | | |
| HPZ7.3-120B2-B | 0.1 | 2.7 | 9.1 | 0.15 | 3.8 | 11.0 | 0.2 | 4.8 | 12.5 | 0.25 | 5.5 | 14.0 | 120 | 图二 |
| | 0.15 | 6.6 | 6.3 | 0.2 | 7.3 | 8.1 | 0.25 | 8.0 | 9.4 | 0.3 | 8.7 | 11.2 | | |
| | 0.2 | 10.3 | 4.9 | 0.3 | 13.4 | 5.3 | 0.3 | 11.3 | 7.6 | 0.4 | 14.3 | 8.2 | | |
| | 0.3 | 15.6 | 3.1 | 0.4 | 18.1 | 3.8 | 0.4 | 16.0 | 5.9 | 0.5 | 18.4 | 6.4 | | |

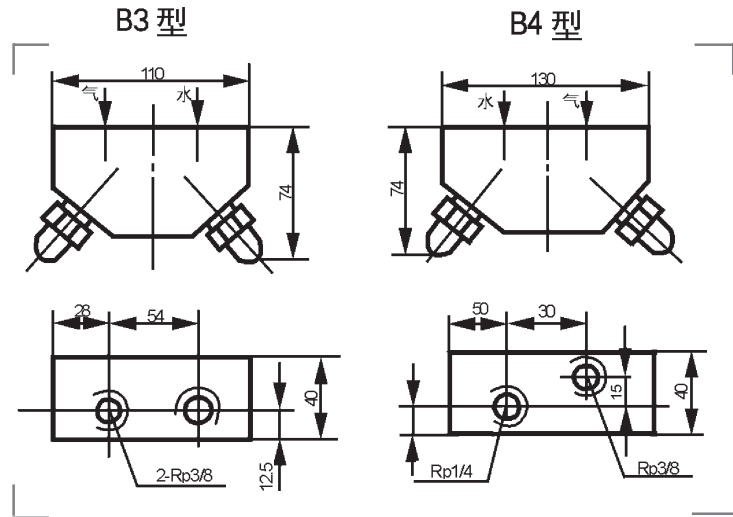
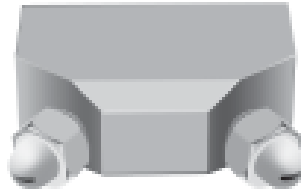
注：用户对性能参数及结构尺寸有特殊要求，订货时请注明。

Note: If users have special requirements for the performance parameters, structure and size, please specify in ordering.

喷雾特性及用途:

这种喷嘴主体采用轧制铜材，因而具有良好的密封、耐磨性，在使用中喷头磨损，可以更换，它的喷淋形状为扁平形，喷射角度大，雾化均匀，因而用较少喷嘴即可满足冷却要求；该喷嘴尤其适用于超低头及合金钢板坯连铸的二次冷却。

The body of the nozzle is made of rolled steel, so it has a good sealing and antiwear property. It can be used to replace the nozzle head when it is worn during operation. Its spray pattern is flat with large spray angle and even atomization. Therefore, the cooling requirements can be achieved with a small number of nozzles. The nozzle is especially suitable for the secondary cooling of slab continuous casting machine for extra-low head and alloy steel.



| 产品型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|---------------|------------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|--|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | |
| HPZ8-160B3 | 0.1 | 2.7 | 31.0 | 0.12 | 4.7 | 36.1 | 0.15 | 1.3 | 46.0 | 0.18 | 1.6 | 51.0 | 160 |
| | 0.2 | 11.0 | 21.0 | 0.2 | 8.0 | 28.0 | 0.2 | 5.5 | 39.0 | 0.2 | 2.8 | 48.0 | |
| | 0.3 | 17.0 | 16.0 | 0.3 | 15.0 | 21.0 | 0.3 | 12.5 | 30.0 | 0.3 | 9.8 | 36.0 | |
| | 0.4 | 22.1 | 12.5 | 0.4 | 20.1 | 17.0 | 0.4 | 18.0 | 24.0 | 0.4 | 15.8 | 30.0 | |
| | 0.5 | 26.0 | 10.0 | 0.5 | 25.0 | 14.0 | 0.5 | 23.2 | 20.0 | 0.5 | 21.0 | 25.0 | |
| | 0.6 | 30.0 | 8.0 | 0.6 | 29.0 | 12.0 | 0.6 | 28.0 | 17.0 | 0.6 | 26.0 | 21.0 | |
| | 0.7 | 33.0 | 6.0 | 0.7 | 33.0 | 10.3 | 0.7 | 32.0 | 15.0 | 0.7 | 31.0 | 18.0 | |
| HPZ13.5-160B3 | 0.2 | 17.0 | 31.0 | 0.2 | 13.5 | 40.0 | 0.2 | 10.0 | 54.0 | 0.2 | 7.5 | 68.0 | 160 |
| | 0.3 | 24.1 | 28.0 | 0.3 | 22.0 | 35.0 | 0.3 | 19.0 | 44.0 | 0.3 | 16.0 | 53.0 | |
| | 0.4 | 30.0 | 26.0 | 0.4 | 28.0 | 32.0 | 0.4 | 26.0 | 40.0 | 0.4 | 24.0 | 46.0 | |
| | 0.5 | 36.0 | 24.0 | 0.5 | 33.0 | 30.0 | 0.5 | 32.0 | 38.0 | 0.5 | 30.0 | 43.0 | |
| | 0.6 | 40.0 | 23.0 | 0.6 | 38.0 | 29.0 | 0.6 | 36.0 | 36.0 | 0.6 | 35.0 | 40.0 | |
| | 0.7 | 44.0 | 22.1 | 0.7 | 42.0 | 28.0 | 0.7 | 40.0 | 35.0 | 0.7 | 39.0 | 39.0 | |
| HPZ11.3-160B4 | 0.1 | 3.0 | 18.3 | 0.1 | 2.6 | 23.5 | 0.15 | 2.6 | 23.9 | 0.2 | 4.1 | 24.2 | 160 |
| | 0.15 | 10.8 | 10.0 | 0.15 | 5.0 | 18.0 | 0.2 | 5.9 | 20.2 | 0.25 | 7.5 | 20 | |
| | 0.2 | 18.8 | 4.0 | 0.2 | 11.3 | 12.5 | 0.25 | 12.7 | 13.0 | 0.3 | 15 | 13.5 | |
| | | | | 0.25 | 21.7 | 4.5 | 0.3 | 21.4 | 7.0 | 0.35 | 23 | 8 | |

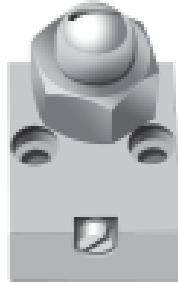
喷雾特性及用途:

这种喷嘴属气、水直交流内混式结构雾化喷嘴，喷雾分布呈山峰状，雾化良好，不易堵塞，与设备安装采用接板式连接，因而零件的安装及更换十分方便；该喷嘴主要适用于大方坯和大圆坯连铸的二次冷却，也可用于其它一切需冷却的设备中。

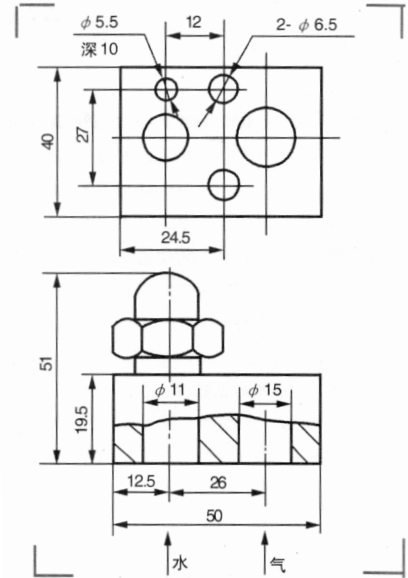
This type of nozzle is marked with the interior direct mixing of air and water, spreading in the shape of a peak and offering excellent atomization. It cannot be easily blocked up. The plate-type connection is adopted when the nozzle is fitted on equipment, providing convenient installation and replacement. The nozzle is mainly fit for secondary cooling of square/roundbloom continuous casting machines, and can also be used for equipment that needs cooling.



A 型



B 型



| 产品型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|---------------|------------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|--|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | |
| HPZ2.8-120B5 | 0.15 | 2.4 | 5.3 | 0.2 | 2.8 | 6.0 | 0.25 | 2.9 | 6.6 | 0.3 | 3.3 | 7 | 120 |
| | 0.2 | 3.2 | 4.7 | 0.25 | 3.3 | 5.4 | 0.3 | 3.6 | 6.1 | 0.35 | 3.8 | 6.5 | |
| | 0.25 | 3.9 | 4.3 | 0.3 | 4.1 | 5.1 | 0.35 | 4.3 | 5.8 | 0.4 | 4.3 | 6.3 | |
| | 0.3 | 4.5 | 3.8 | 0.35 | 4.6 | 4.8 | 0.4 | 4.8 | 5.4 | 0.45 | 4.9 | 6.0 | |
| | 0.35 | 5 | 3.5 | 0.4 | 5.2 | 4.2 | 0.45 | 5.4 | 5 | 0.5 | 5.4 | 5.6 | |
| HPZ2.5-70B5 | 0.15 | 2.2 | 5.1 | 0.2 | 2.5 | 5.7 | 0.25 | 2.7 | 6.2 | 0.3 | 2.8 | 6.8 | 70 |
| | 0.2 | 3.1 | 4.2 | 0.25 | 3.3 | 4.9 | 0.3 | 3.3 | 5.6 | 0.35 | 3.5 | 6.1 | |
| | 0.25 | 3.9 | 3.4 | 0.3 | 4.2 | 4.1 | 0.35 | 4.1 | 5 | 0.4 | 4.3 | 5.4 | |
| | 0.3 | 4.7 | 2.6 | 0.35 | 4.7 | 3.6 | 0.4 | 4.8 | 4.3 | 0.45 | 4.9 | 4.8 | |
| | 0.35 | 5.3 | 2.1 | 0.4 | 5.4 | 2.9 | 0.45 | 5.5 | 3.5 | 0.5 | 5.5 | 4.3 | |
| HPZ6.2-70B5 | 0.1 | 3.5 | 8 | 0.15 | 4.3 | 9.0 | 0.15 | 3.3 | 10.6 | 0.2 | 4.2 | 11.2 | 70 |
| | 0.15 | 5.3 | 6.9 | 0.2 | 6.2 | 7.8 | 0.2 | 5.2 | 9.6 | 0.25 | 5.7 | 10.3 | |
| | 0.2 | 7.5 | 5.6 | 0.25 | 8.1 | 6.6 | 0.25 | 6.5 | 8.7 | 0.3 | 7.3 | 9.5 | |
| | 0.25 | 9.3 | 4.4 | 0.3 | 9.8 | 5.5 | 0.3 | 8.3 | 7.5 | 0.35 | 8.8 | 8.2 | |
| | 0.3 | 10.4 | 3.5 | 0.35 | 10.8 | 4.6 | 0.35 | 9.8 | 6.3 | 0.4 | 9.7 | 7.2 | |
| | 0.35 | 12 | 2.7 | 0.4 | 12.3 | 3.8 | 0.4 | 11.3 | 5.7 | 0.45 | 11.1 | 6.4 | |

| 产品型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|---------------|------------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|--|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | |
| HPZ1.8-90B5 | 0.1 | 1.2 | 8.0 | 0.1 | 1.0 | 10.3 | 0.2 | 1.7 | 11.9 | 0.2 | 1.6 | 13.5 | 90 |
| | 0.2 | 2.0 | 7.7 | 0.2 | 1.8 | 10.0 | 0.3 | 2.3 | 11.6 | 0.3 | 2.2 | 13.2 | |
| | 0.3 | 2.6 | 7.5 | 0.3 | 2.4 | 9.5 | 0.4 | 2.8 | 11.2 | 0.4 | 2.7 | 12.9 | |
| | 0.4 | 3.1 | 7.3 | 0.4 | 3.0 | 9.0 | 0.5 | 3.3 | 10.7 | 0.5 | 3.1 | 12.6 | |
| | 0.5 | 3.4 | 6.6 | 0.5 | 3.3 | 8.6 | 0.6 | 3.6 | 10.4 | 0.6 | 3.5 | 12.3 | |
| HPZ2.5-120B5 | 0.1 | 1.6 | 11.4 | 0.15 | 2.0 | 12.8 | 0.2 | 2.3 | 14.8 | 0.2 | 2.1 | 16.9 | 120 |
| | 0.2 | 2.6 | 10.4 | 0.2 | 2.5 | 12.5 | 0.3 | 3.1 | 14.0 | 0.3 | 2.9 | 16.7 | |
| | 0.3 | 3.4 | 9.7 | 0.3 | 3.2 | 12.1 | 0.4 | 3.7 | 13.6 | 0.4 | 3.6 | 16.3 | |
| | 0.4 | 4.0 | 9.3 | 0.4 | 3.9 | 11.6 | 0.5 | 4.3 | 13.2 | 0.5 | 4.2 | 16.0 | |
| | | | | 0.5 | 4.4 | 11.3 | 0.6 | 4.8 | 12.8 | 0.6 | 4.7 | 15.6 | |
| HPZ2.7-120B5 | 0.1 | 1.7 | 11.2 | 0.1 | 1.4 | 13.4 | 0.2 | 2.5 | 15.3 | 0.2 | 2.3 | 17.8 | 120 |
| | 0.2 | 3.1 | 9.8 | 0.2 | 2.7 | 12.9 | 0.3 | 3.6 | 14.2 | 0.3 | 3.3 | 17.1 | |
| | 0.3 | 4.2 | 9.3 | 0.3 | 3.9 | 11.4 | 0.4 | 4.6 | 13.1 | 0.4 | 4.3 | 15.7 | |
| | 0.4 | 5.2 | 8.2 | 0.4 | 4.9 | 10.1 | 0.5 | 5.4 | 12.4 | 0.5 | 5.1 | 14.9 | |
| | 0.5 | 6.0 | 6.5 | 0.5 | 5.7 | 8.8 | 0.6 | 6.2 | 11.3 | 0.6 | 5.9 | 14.0 | |

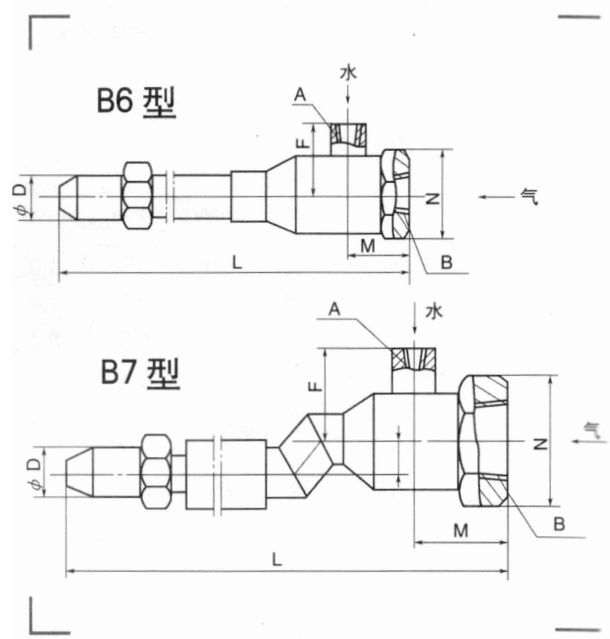
| 产品型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|---------------|------------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|--|
| | 0.1 | | | 0.2 | | | 0.3 | | | 0.4 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | |
| HPZ0.8-90B5 | | | | 0.2 | 0.8 | 9.5 | 0.2 | 0.4 | 14.2 | 0.3 | 0.7 | 18.8 | 90 |
| | | | | 0.3 | 1.4 | 8.8 | 0.3 | 1.0 | 13.0 | 0.4 | 1.2 | 17.3 | |
| | | | | 0.4 | 1.7 | 8.1 | 0.4 | 1.5 | 12.2 | 0.5 | 1.5 | 16.2 | |
| | | | | 0.5 | 2.1 | 7.4 | 0.5 | 1.8 | 11.5 | 0.6 | 1.9 | 14.8 | |
| | | | | 0.6 | 2.4 | 7.0 | 0.6 | 2.1 | 10.8 | | | | |
| HPZ1.5-70B5 | 0.1 | 1.1 | 7.8 | 0.1 | 1.0 | 11.0 | 0.2 | 1.4 | 14.6 | 0.2 | 1.3 | 18.6 | 70 |
| | 10.2 | 1.7 | 7.0 | 0.2 | 1.5 | 10.9 | 0.3 | 1.9 | 14.5 | 0.3 | 1.7 | 18.5 | |
| | 0.3 | 2.1 | 6.7 | 0.3 | 2.0 | 10.6 | 0.4 | 2.2 | 14.5 | 0.4 | 2.1 | 18.5 | |
| | 0.4 | 2.5 | 6.6 | 0.4 | 2.4 | 10.6 | 0.5 | 2.6 | 14.4 | 0.5 | 2.4 | 18.4 | |
| | | | | 0.5 | 2.7 | 10.3 | 0.6 | 2.9 | 14.3 | 0.6 | 2.7 | 18.2 | |
| HPZ1.5-120B5 | 0.1 | 1.2 | 7.5 | 0.1 | 1.0 | 11.5 | 0.2 | 1.4 | 15.4 | 0.2 | 1.3 | 18.8 | 120 |
| | 0.2 | 1.7 | 6.8 | 0.2 | 1.5 | 11.4 | 0.3 | 1.9 | 15.2 | 0.3 | 1.7 | 18.7 | |
| | 0.3 | 2.2 | 5.7 | 0.3 | 2.0 | 10.6 | 0.4 | 2.2 | 14.9 | 0.4 | 2.1 | 18.6 | |
| | | | | 0.4 | 2.4 | 10.4 | 0.5 | 2.6 | 14.3 | 0.5 | 2.4 | 18.5 | |
| | | | | 0.5 | 2.7 | 10.4 | 0.6 | 2.9 | 14.2 | 0.6 | 2.7 | 18.5 | |

| 产品型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|---------------|------------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|--|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | |
| HPZ2.2-110BX | 0.1 | 1.77 | 6.10 | 0.1 | 0.75 | 11.91 | 0.2 | 1.82 | 13.02 | 0.2 | 1.48 | 15.04 | 110 |
| | 0.2 | 3.42 | 4.14 | 0.2 | 2.20 | 9.29 | 0.3 | 3.30 | 10.93 | 0.3 | 2.83 | 13.10 | |
| | 0.3 | 4.63 | 2.75 | 0.3 | 3.63 | 7.52 | 0.4 | 4.40 | 8.74 | 0.4 | 3.95 | 11.00 | |
| | | | | 0.4 | 4.88 | 6.10 | 0.5 | 5.52 | 7.04 | 0.5 | 5.05 | 9.26 | |
| | | | | 0.5 | 6.03 | 4.81 | 0.6 | 6.40 | 6.35 | 0.6 | 5.93 | 7.95 | |

喷雾特性及用途:

该喷嘴结构新颖，喷淋形式为扁平带状，喷射角较大、雾化均匀，喷口不易堵塞，嘴体用不锈钢制作而成，因此，同普通喷嘴相比，具有使用寿命长，性能稳定等特点；主要用于大板坯连铸机的二次冷却，也可用来净化空气，冷却设备中。

The nozzle has a new structure. The spray pattern is like flat band, with a bigger spray angle and even atomization. The nozzle aperture cannot be easily blocked up. The nozzle body is made of stainless steel, so it has the feature of long service life and stable performance comparing with the general nozzle. It is mainly used for the secondary cooling of large slab continuous casting machine and can be also used for air cleaning and cooling of equipment.



| 产品型号 Model | 外形尺寸 Outline size | | | | | | | 备注 Remark |
|---------------|-------------------|-------|------|------|------|----|-----|--------------|
| | A | B | M | N | F | D | L | |
| HPZ5.2-130B6 | Rc1/4 | Rc1/4 | 28.5 | 36.5 | 34.5 | 20 | 550 | B6型 |
| HPZ7.2-130B6 | Rc1/4 | Rc1/4 | 28.5 | 36.5 | 34.5 | 20 | 550 | B6型 |
| HPZ11.1-90B6 | Rc1/4 | Rc3/8 | 28.5 | 36.5 | 34.5 | 20 | 100 | B6型 |
| HPZ15-130B6 | Rc1/2 | Rc1/2 | 37 | 53 | 49 | 25 | 550 | B6型 |
| HPZ24.1-130B7 | Rc1/2 | Rc1/2 | 37 | 53 | 49 | 31 | 450 | B7型 |
| HPZ24.1-130B6 | Rc1/2 | Rc1/2 | 37 | 53 | 49 | 31 | 450 | B6型 |
| HPZ35.7-130B7 | Rc1/2 | Rc1/2 | 37 | 53 | 49 | 31 | 450 | B7型 |
| HPZ35.7-130B6 | Rc1/2 | Rc1/2 | 37 | 53 | 49 | 31 | 450 | B6型 |
| HPZ24-130B6 | Rc1/2 | Rc1/2 | 37 | 53 | 49 | 40 | 475 | B6型 |
| | | | | | | | 295 | |
| | | | | | | | 225 | |
| | | | | | | | 175 | |

注：用户对性能参数及结构尺寸有特殊要求，订货时请注明。

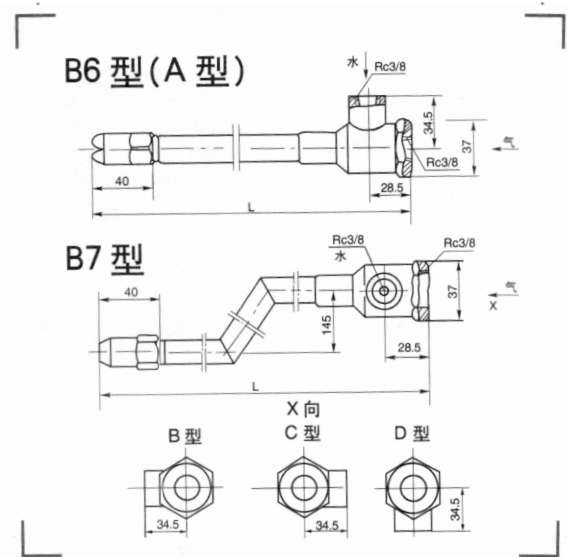
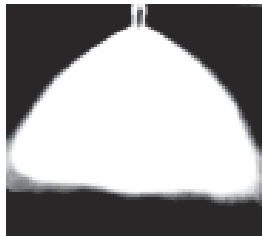
Note: If users have special requirements for the performance parameter, structure and size, please specify in ordering.

| 产品型号 Model | 技术性能 Technical | | | | | | |
|---------------|--|----------------------------------|---|--------------------------------|---|-------------------------------------|-------------------------------------|
| | 气压 Atmospheric pressure (MPa) | 水压 Water pressure (MPa) | 气量 Air flow (Nm ³ /h) | 水量 Water flow (L/min) | 气、水体积比 ratio of volume of Air & water | 平均粒子度 (average grain size | 喷射角 (Spray angle (degree) |
| HPZ5.2-130B6 | 0.072 | 0.072 | 10.5 | 2.40 | 72.92 | 81.4 | 130 |
| | 0.125 | 0.192 | 10.5 | 5.20 | 33.65 | 92.1 | |
| | 0.184 | 0.365 | 10.5 | 8.00 | 21.88 | 108.1 | |
| HPZ7.2-130B6 | 0.077 | 0.075 | 14.4 | 3.30 | 72.73 | 82.8 | 130 |
| | 0.133 | 0.199 | 14.4 | 7.15 | 33.57 | 95.0 | |
| | 0.190 | 0.387 | 14.4 | 11.00 | 21.82 | 115.6 | |
| HPZ11.1-90B6 | 0.068 | 0.066 | 22.2 | 5.10 | 72.55 | 69.9 | 90 |
| | 0.119 | 0.191 | 22.2 | 11.05 | 33.48 | 82.7 | |
| | 0.183 | 0.377 | 22.2 | 17.00 | 21.76 | 96.2 | |
| HPZ15-130B6 | 0.076 | 0.074 | 30.1 | 6.90 | 72.71 | 88.5 | 130 |
| | 0.135 | 0.199 | 30.1 | 14.95 | 33.56 | 110.1 | |
| | 0.195 | 0.377 | 30.1 | 23.00 | 21.81 | 132.0 | |
| HPZ24.1-130B7 | 0.075 | 0.074 | 48.4 | 11.10 | 72.67 | 92.9 | 130 |
| | 0.129 | 0.195 | 48.4 | 24.05 | 33.54 | 139.1 | |
| | 0.186 | 0.367 | 48.4 | 37.00 | 21.80 | 152.2 | |
| HPZ24.1-130B6 | 0.070 | 0.069 | 48.4 | 11.10 | 72.67 | 92.9 | 130 |
| | 0.121 | 0.193 | 48.4 | 24.05 | 33.54 | 139.1 | |
| | 0.179 | 0.368 | 48.4 | 37.00 | 21.80 | 152.2 | |
| HPZ24-130B6 | 0.20 | 0.20 | 102.5 | 24.00 | 71.2 | | 130 |
| | 0.25 | 0.3 | 87.0 | 33.33 | 43.5 | | |
| | 0.30 | 0.35 | 112.0 | 35.00 | 53.3 | | |
| | 0.35 | 0.55 | 99.7 | 55.00 | 30.2 | | |
| HPZ35.7-130B7 | 0.073 | 0.072 | 71.9 | 16.50 | 72.63 | 95.8 | 130 |
| | 0.13 | 0.2 | 71.9 | 35.75 | 33.52 | 151.3 | |
| | 0.189 | 0.377 | 71.9 | 55.00 | 21.79 | 168.4 | |
| HPZ35.7-130B6 | 0.070 | 0.068 | 71.9 | 16.50 | 72.63 | 95.8 | 130 |
| | 0.122 | 0.195 | 71.9 | 35.75 | 33.52 | 151.3 | |
| | 0.184 | 0.383 | 71.9 | 55.00 | 21.79 | 168.4 | |

喷雾特性及用途:

这种喷嘴喷淋形式为扇形，喷射角较大，且雾化非常均匀，并能够在辊缝很窄的情况下，尽可能接近铸坯表面，从而使铸坯获得良好的冷却效果；此类喷嘴主要适用于板坯及大方坯连铸的二次冷却。

The spray pattern of the nozzle is in flat shape, with a large spray angle and very even atomization. It can be close to the surface of slab as much as possible under the condition that roller gap is very narrow, so as to make slab to get good cooling result. This nozzle is mainly suitable for the secondary cooling of continuous casting machine for plate blank and large square blank.



| 产品型号 Model | 气压 (MPa) Atmospheric pressure (MPa) | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|------------------------|-------------------------------------|-----------------------------|--|-------------------------------|-----------------------------|--|-------------------------------|-----------------------------|--|---------------------------------------|
| | 0.1 | | | 0.2 | | | 0.24 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | |
| HPZ3.9-130B6 | 0.2 | 5.2 | 11.6 | 0.2 | 3.9 | 22.1 | 0.2 | 3.7 | 26.1 | 130 |
| | 0.4 | 8.2 | 8.5 | 0.4 | 7.3 | 18.2 | 0.4 | 6.8 | 21.2 | |
| | 0.6 | 9.7 | 7.1 | 0.6 | 9.6 | 15.1 | 0.6 | 9.3 | 18.3 | |
| HPZ4.6-130B6 | 0.2 | 5.9 | 19.1 | 0.2 | 4.6 | 25.5 | 0.2 | 4.3 | 30.4 | 130 |
| | 0.4 | 9.2 | 9.7 | 0.4 | 8.2 | 20.9 | 0.4 | 7.8 | 25.4 | |
| | 0.6 | 10.8 | 8.1 | 0.6 | 10.8 | 17.3 | 0.6 | 10.6 | 21.3 | |
| HPZ5.3-130B6 | 0.2 | 7.7 | 16.5 | 0.2 | 5.3 | 39.5 | 0.2 | 4.3 | 50.6 | 130 |
| | 0.4 | 12.1 | 9.6 | 0.4 | 10.6 | 26.0 | 0.1 | 9.8 | 33.5 | |
| | 0.6 | 14.8 | 7.3 | 0.6 | 14.0 | 18.9 | 0.6 | 13.4 | 25 | |
| HPZ6.6-130B6 A型 | 0.2 | 9.5 | 14.4 | 0.2 | 6.6 | 36.5 | 0.2 | 5.6 | 47.8 | 130 |
| | 0.4 | 15.8 | 7.5 | 0.4 | 13.5 | 22.6 | 0.4 | 12.7 | 29.5 | |
| | 0.6 | 19.1 | 5.5 | 0.6 | 18.2 | 15.9 | 0.6 | 17.4 | 21.7 | |
| HPZ6.6-130B7 B、C、D型 | 0.2 | 9.5 | 14.4 | 0.2 | 6.6 | 36.5 | 0.2 | 5.6 | 47.8 | 130 |
| | 0.4 | 15.8 | 7.5 | 0.4 | 13.5 | 22.6 | 0.4 | 12.7 | 29.5 | |
| | 0.6 | 19.1 | 5.5 | 0.6 | 18.2 | 15.9 | 0.6 | 17.4 | 21.7 | |

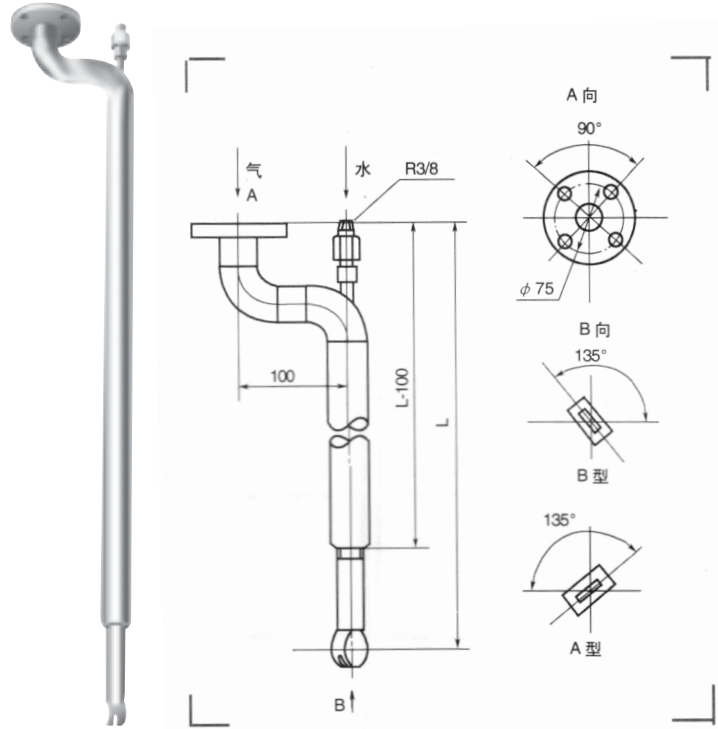
注：尺寸L 可根据用户需要给定。

Note: Size L can be changed according to requirement of users.

喷雾特性及用途:

该喷嘴结构新颖，雾化效果好，性能稳定，耗水量小，喷头可更换，安装对中十分方便，喷射形状为扇形，水流分布为长方形抛物线状；主要适用于大板坯连铸机扇形段的二次冷却，也适用于空气增湿，设备冷却等。

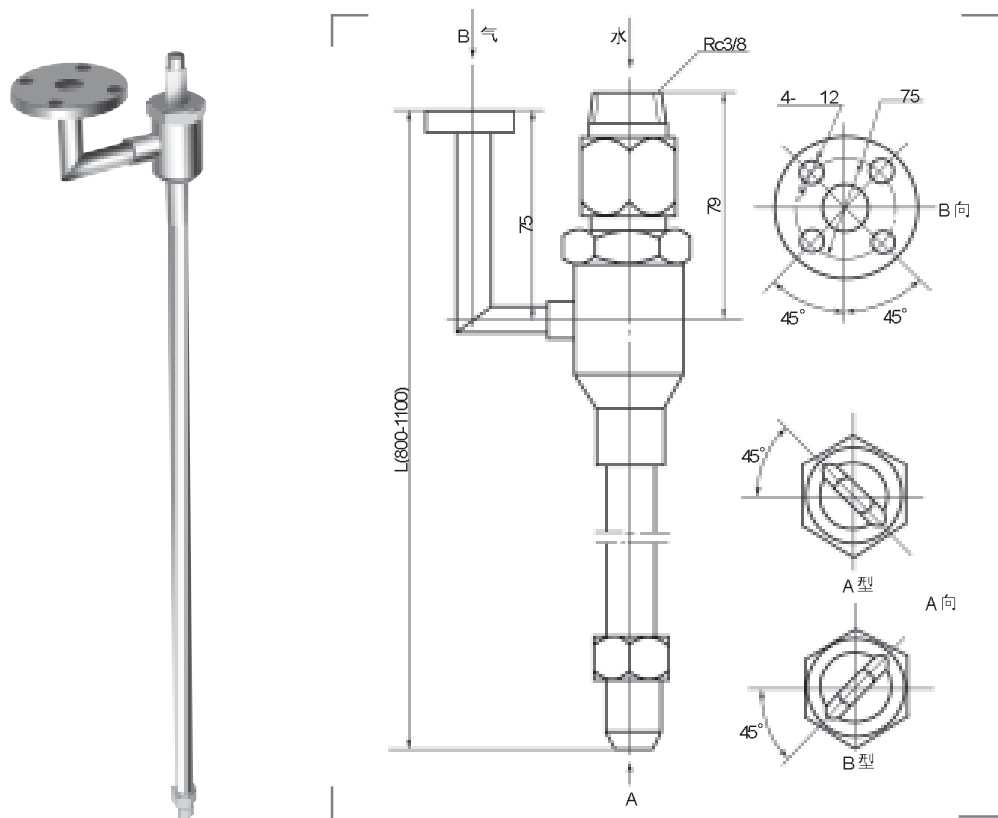
The nozzle has a new structure, good atomizing result, stable performance and low water consumption. The spray head can be replaced and it is easy to be centered. The spray pattern is in flat shape, and the flow distribution is rectangle parabola. It is mainly suitable for the secondary cooling of same-ent of continuous casting machine for large slab and can be also used for increasing air humidity and the cooling of equipment.



| 产品型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|------------------------|------------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|--|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | |
| HPZ2.7-130B8 (A B型) | 0.2 | 3.7 | 46.5 | 0.25 | 3.9 | 52.5 | 0.3 | 3.8 | 59.0 | 0.35 | 3.8 | 63.5 | 130 |
| | 0.3 | 6.8 | 37.0 | 0.3 | 5.7 | 47.0 | 0.4 | 6.8 | 48.5 | 0.4 | 5.8 | 57.0 | |
| | 0.4 | 8.8 | 31.8 | 0.4 | 7.8 | 40.3 | 0.5 | 8.8 | 43.0 | 0.5 | 7.8 | 50.8 | |
| | 0.5 | 10.3 | 29.0 | 0.5 | 9.7 | 36.0 | 0.6 | 10.4 | 39.3 | 0.6 | 9.8 | 46.5 | |
| | 0.55 | 10.9 | 28.5 | 0.6 | 11.1 | 33.0 | 0.7 | 11.7 | 37.0 | 0.7 | 11.0 | 43.3 | |
| HPZ3.7-130B8 (A B型) | 0.2 | 5.0 | 42.0 | 0.25 | 5.3 | 47.0 | 0.3 | 5.2 | 52.3 | 0.35 | 5.0 | 59 | 130 |
| | 0.3 | 9.1 | 31.0 | 0.3 | 7.3 | 40.5 | 0.4 | 9.0 | 42.0 | 0.4 | 7.4 | 51.7 | |
| | 0.4 | 11.8 | 26.0 | 0.4 | 10.3 | 32.5 | 0.5 | 11.7 | 35.3 | 0.5 | 10.4 | 49.3 | |
| | 0.5 | 13.8 | 23.7 | 0.5 | 12.8 | 29.3 | 0.6 | 13.8 | 32.0 | 0.6 | 12.7 | 39.0 | |
| | 0.55 | 14.4 | 23.2 | 0.6 | 14.9 | 26.5 | 0.65 | 14.8 | 30.5 | 0.7 | 14.8 | 36.0 | |

注：尺寸L 可根据用户需要给定。

Note: Size L can be changed according to requirement of users.



| 产品型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|-----------------------|------------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|--|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | |
| HPZ4.1-130B9 (A B) | 0.15 | 1.8 | 34.5 | 0.25 | 4.1 | 32.1 | 0.3 | 4.0 | 36.6 | 0.35 | 4.8 | 39.0 | 130 |
| | 0.2 | 4.2 | 27.5 | 0.3 | 6.0 | 28.5 | 0.35 | 5.7 | 31.8 | 0.4 | 5.6 | 35.7 | |
| | 0.25 | 5.6 | 24.0 | 0.35 | 7.0 | 25.6 | 0.4 | 7.0 | 29 | 0.45 | 7.0 | 32.0 | |
| | 0.3 | 7.1 | 21.2 | 0.4 | 8.0 | 24.1 | 0.45 | 8.3 | 27 | 0.5 | 8.0 | 31.4 | |
| | 0.35 | 8.2 | 19.8 | 0.45 | 9.0 | 22.3 | 0.5 | 9.0 | 26.3 | 0.55 | 9.2 | 29.1 | |
| HPZ1.9-130B9 (A B) | 0.2 | 1.9 | 15.0 | 0.25 | 1.9 | 17.6 | 0.3 | 1.8 | 19.8 | 0.35 | 1.8 | 22 | 130 |
| | 0.25 | 2.7 | 14.0 | 0.3 | 2.8 | 15 | 0.35 | 2.8 | 16.6 | 0.4 | 2.7 | 19.0 | |
| | 0.3 | 3.3 | 12.4 | 0.35 | 3.5 | 13.6 | 0.4 | 3.4 | 16 | 0.45 | 3.5 | 17.1 | |
| | 0.35 | 3.9 | 11.0 | 0.4 | 4.0 | 12.6 | 0.45 | 4.0 | 14.5 | 0.5 | 3.9 | 16.5 | |
| | 0.4 | 4.4 | 9.9 | 0.45 | 4.5 | 12.0 | 0.5 | 4.5 | 14 | 0.55 | 4.5 | 15.5 | |

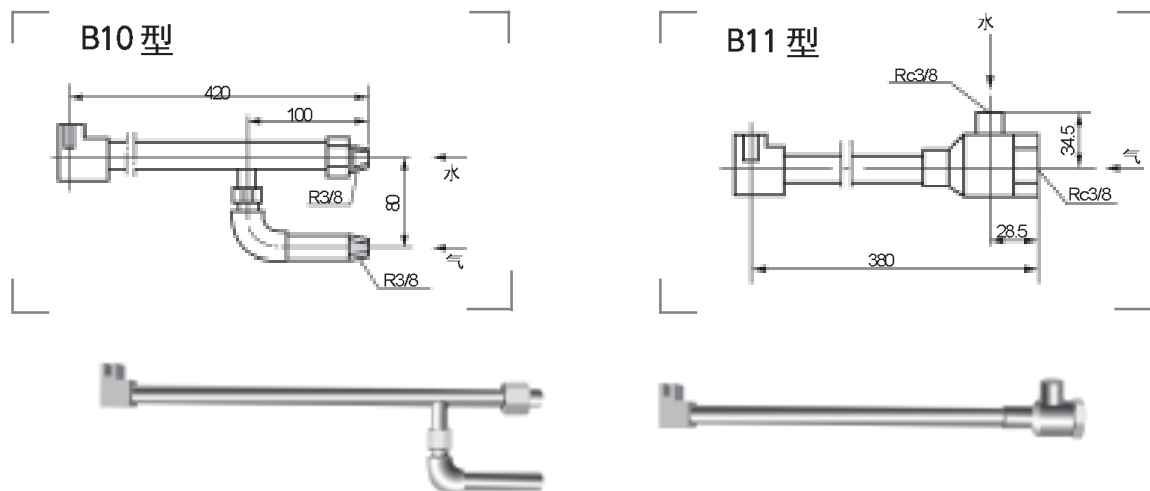
注：尺寸L 可根据用户需要给定。

Note: Size L can be changed according to requirement of users.

喷雾特性及用途:

该喷嘴结构简单、安装调试方便，喷射形状为扁平状，射流稳定；主要适用于连铸机扇形段足辊的外冷却，也可用于其它机械冷却、清洗等。

The nozzle has a simple structure and can be easily installed. The spray pattern is flat, with the stable injection. It is mainly suitable for outside cooling of foot roller at segment of continuous casting machine and can be also used for cooling and cleaning of other machines.

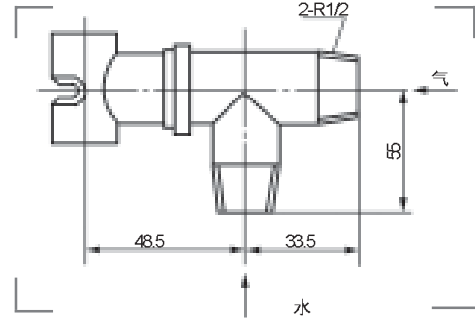


| 产品型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|---------------|------------------------------------|--------------------------------|--|----------------------------------|--------------------------------|--|----------------------------------|--------------------------------|--|----------------------------------|--------------------------------|--|--|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m ³ /h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m ³ /h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m ³ /h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m ³ /h) | |
| HPZ5-20B10 | 0.15 | 4.8 | 32.6 | 0.1 | 1.9 | 43.3 | 0.1 | 1.8 | 52.4 | 0.15 | 2.3 | 59.6 | 20 |
| | 0.2 | 5.7 | 31.1 | 0.15 | 3.7 | 42.4 | 0.15 | 3.7 | 50.5 | 0.2 | 4.3 | 58 | |
| | 0.25 | 6.9 | 29.9 | 0.2 | 5 | 39.8 | 0.2 | 4.7 | 48.6 | 0.3 | 6.3 | 54.8 | |
| | 0.27 | 7.5 | 29.6 | 0.25 | 6.1 | 38.9 | 0.3 | 6.8 | 46.8 | 0.4 | 8 | 52.4 | |
| | 0.3 | 7.9 | 29.0 | 0.3 | 7.1 | 38.1 | 0.4 | 8.5 | 43.8 | 0.5 | 10.2 | 49 | |
| HPZ46-20B11 | 0.1 | 2.9 | 39.0 | 0.2 | 4.6 | 44.9 | 0.2 | 4.0 | 53.7 | 0.3 | 5.5 | 57.7 | 20 |
| | 0.2 | 5.4 | 33.1 | 0.3 | 6.7 | 39.0 | 0.3 | 6.0 | 48.9 | 0.4 | 7.1 | 53.9 | |
| | 0.3 | 7.3 | 29.2 | 0.4 | 8.0 | 35.2 | 0.4 | 7.4 | 44.8 | 0.5 | 8.5 | 50.1 | |
| | 0.4 | 8.6 | 25.5 | 0.5 | 9.6 | 31.9 | 0.5 | 9.0 | 40.9 | 0.6 | 10.0 | 46.7 | |

喷雾特性及用途:

这种喷嘴的主体及喷头均采用精密铸造工艺制造而成, 具有结构紧凑, 技术性能良好, 雾化均匀等特点; 主要用于板坯连铸机二次冷却, 也可用于环保中净化空气及其它工序的冷却。

The body of the nozzle and the nozzle head are manufactured in precision casting technology and have the features of compact structure, good technical property, even atomization etc. It is mainly suitable for the secondary cooling of slab continuous casting machine and can be also used for air-cleaning of environmental protection and cooling in other procedures.

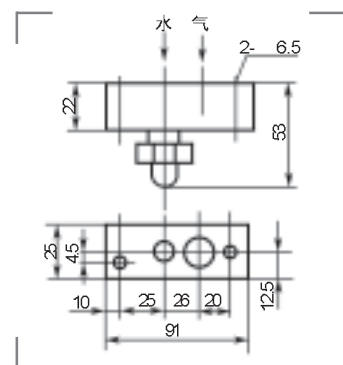
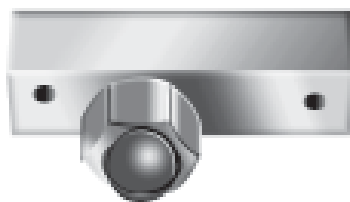
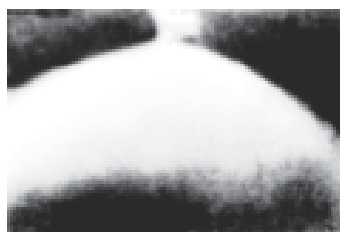


| 产品型号 Model | 气压 (MPa) Atmospheric pressure (MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|---------------|-------------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|---------------------------------------|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | |
| HPZ2-85B12 | 0.1 | 2.8 | 6.4 | 0.1 | 2.0 | 7.9 | 0.1 | 1.2 | 8.8 | 0.15 | 2.0 | 9.3 | 85 |
| | 0.2 | 5.8 | 4.6 | 0.2 | 4.1 | 6 | 0.2 | 4.3 | 7.6 | 0.2 | 3.3 | 8.7 | |
| | 0.3 | 8.3 | 3.2 | 0.3 | 7.3 | 4.4 | 0.3 | 6.5 | 5.8 | 0.3 | 5.7 | 7.1 | |
| | | | | 0.4 | 9.7 | 3.4 | 0.4 | 8.7 | 4.1 | 0.4 | 7.8 | 5.7 | |
| HPZ3.8-85B12 | 0.15 | 3.3 | 9.8 | 0.2 | 3.8 | 11 | 0.25 | 3.7 | 13 | 0.3 | 4.2 | 12.2 | 85 |
| | 0.2 | 7.7 | 4.3 | 0.3 | 10.7 | 3.7 | 0.3 | 8.3 | 5.7 | 0.4 | 10.3 | 5.2 | |
| HPZ7-100B12 | 0.1 | 3.0 | 24.2 | 0.2 | 7.0 | 23.0 | 0.2 | 4.5 | 29 | 0.25 | 5.3 | 30.0 | 100 |
| | 0.2 | 8.7 | 17.8 | 0.3 | 11.3 | 16.3 | 0.3 | 9.7 | 22.8 | 0.3 | 8.0 | 27.5 | |
| | 0.3 | 13.0 | 13.2 | 0.4 | 15.0 | 14.0 | 0.4 | 13.3 | 17.8 | 0.4 | 11.5 | 23.2 | |
| | 0.4 | 16.7 | 11.0 | 0.5 | 18.3 | 12.8 | 0.5 | 16.8 | 15.2 | 0.5 | 15.3 | 18.0 | |
| | 0.5 | 19.7 | 10.5 | 0.6 | 21.0 | 12.0 | 0.6 | 19.8 | 13.7 | 0.6 | 18.7 | 16.0 | |
| HPZ9.7-100B12 | 0.1 | 3.5 | 30 | 0.15 | 5.0 | 28.0 | 0.2 | 6.2 | 34.0 | 0.5 | 3.5 | 41.5 | 100 |
| | 0.2 | 13.3 | 18.8 | 0.2 | 9.7 | 23.0 | 0.3 | 14.7 | 25.5 | 0.3 | 11.3 | 33.8 | |
| | 0.3 | 21.0 | 15 | 0.3 | 17.8 | 19.4 | 0.4 | 21.2 | 20.5 | 0.4 | 18.7 | 25.0 | |
| | 0.4 | 26.2 | 13.40 | 0.4 | 24.0 | 16.5 | 0.5 | 26.3 | 18.0 | 0.5 | 24.0 | 22.2 | |
| HPZ20-100B12 | 0.1 | 10.7 | 15.2 | 0.1 | 9.0 | 19.25 | 0.15 | 12.0 | 21.3 | 0.15 | 9.0 | 26.6 | 100 |
| | 0.15 | 17.3 | 11.2 | 0.15 | 18.0 | 17.1 | 0.2 | 16.7 | 18.6 | 0.2 | 13.3 | 25.0 | |
| | 0.2 | 32.5 | 3.6 | 0.2 | 20.0 | 12.0 | 0.25 | 21.7 | 14.9 | 0.3 | 24.2 | 17.8 | |
| | | | | 0.25 | 33.3 | 4.9 | 0.3 | 30.0 | 10.5 | 0.4 | 43.3 | 5.4 | |

喷雾特性及用途:

该喷嘴结构新颖，采用接板连接的安装形式，其喷淋形式为扁平形，喷雾均匀，水流分布呈长抛物线状；主要适用于大方坯和大板坯连铸的二次冷却，也可用于环保中的除尘，空气增湿等。

The nozzle, novel in structure, adopts connecting board for the installation mode. The spray is in a flat shape, providing uniform atomized water distribution. The nozzle is mainly used in the secondary cooling of continuous casting machine for large bloom and large slab, and can also be used for dust removal, increasing air humidity, etc. as well as in environment protection.



| 产品型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|----------------|------------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|---------------------------------------|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | |
| HPZ2.7-130B13 | 0.15 | 2.7 | 5.7 | 0.2 | 2.7 | 6.6 | 0.25 | 2.8 | 7.4 | 0.3 | 3.0 | 7.9 | 130 |
| | 0.20 | 4.3 | 3.7 | 0.25 | 4.5 | 4.7 | 0.3 | 4.6 | 5.5 | 0.4 | 5.8 | 4.7 | |
| | 0.25 | 5.8 | 2.6 | 0.3 | 5.8 | 3.4 | 0.4 | 6.8 | 3.4 | 0.5 | 7.8 | 3.2 | |
| | 0.30 | 6.8 | 2.1 | 0.35 | 7.0 | 2.7 | 0.5 | 8.6 | 2.3 | 0.6 | 9.6 | 2.4 | |
| HPZ9.7-130B13 | 0.1 | 4.3 | 25.0 | 0.15 | 5.7 | 27.7 | 0.2 | 6.8 | 30.0 | 0.2 | 4.3 | 35.0 | 130 |
| | 0.2 | 12.4 | 17.8 | 0.2 | 9.7 | 24.5 | 0.3 | 13.4 | 24.8 | 0.3 | 11.3 | 29.5 | |
| | 0.3 | 17.6 | 15.0 | 0.3 | 15.6 | 20.0 | 0.4 | 18.3 | 21.2 | 0.4 | 16.7 | 25.0 | |
| | 0.4 | 21.8 | 13.5 | 0.4 | 20.2 | 17.3 | 0.5 | 22.5 | 19.0 | 0.5 | 20.8 | 22.5 | |
| HPZ11.2-130B13 | 0.1 | 3.7 | 29.5 | 0.15 | 4.5 | 31.0 | 0.2 | 6.0 | 33.0 | 0.25 | 7.7 | 35.0 | 130 |
| | 0.2 | 16.5 | 17.3 | 0.2 | 11.2 | 23.7 | 0.3 | 18.0 | 22.5 | 0.3 | 13.3 | 29.0 | |
| | 0.3 | 26.2 | 11.0 | 0.3 | 22.3 | 17.0 | 0.4 | 26.7 | 17.0 | 0.4 | 23.1 | 23.0 | |
| | 0.4 | 33.3 | 8.0 | 0.4 | 30.2 | 12.6 | 0.5 | 33.3 | 13.3 | 0.5 | 30.0 | 18.0 | |
| HPZ2.4-95B13 | 0.15 | 2.2 | 4.8 | 0.2 | 2.4 | 5.6 | 0.25 | 2.8 | 5.9 | 0.3 | 2.9 | 6.4 | 95 |
| | 0.2 | 3.0 | 4.2 | 0.25 | 3.2 | 4.8 | 0.3 | 3.4 | 5.2 | 0.35 | 3.5 | 6.0 | |
| | 0.25 | 3.7 | 3.6 | 0.3 | 3.8 | 4.2 | 0.35 | 4.0 | 4.9 | 0.4 | 4.1 | 5.6 | |
| | 0.3 | 4.3 | 3.1 | 0.35 | 4.4 | 3.9 | 0.4 | 4.5 | 4.6 | 0.45 | 4.6 | 5.2 | |
| | 0.35 | 4.9 | 2.6 | 0.4 | 4.9 | 3.4 | 0.45 | 5.1 | 4.1 | 0.5 | 5.1 | 4.8 | |
| | 0.4 | 5.3 | 2.3 | 0.45 | 5.5 | 3.2 | 0.5 | 5.6 | 3.8 | 0.55 | 5.7 | 4.4 | |

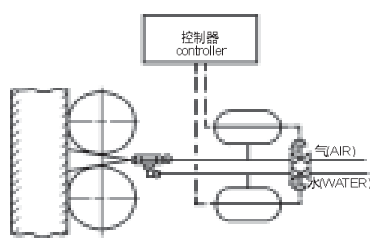
注：用户对性能参数及结构尺寸有特殊要求，订货时请注明。

Note: If users have special requirements for the performance parameters, structure and size, please specify in ordering.

喷雾特性及用途:

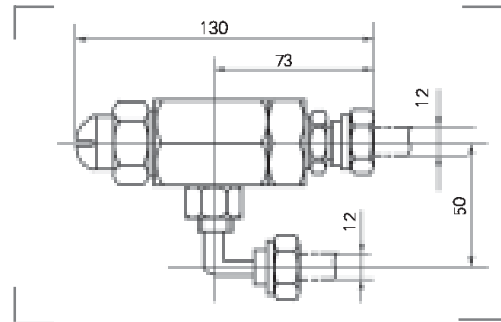
该系列喷嘴结构新颖，连接安装形式为卡套接管式，安装对中十分方便，在使用过程中喷头磨损，可以更换，它的喷淋形状为扁平带状，具有雾化均匀，水量调节范围宽，不易堵塞等特点；主要用于板坯连铸宽面的二次冷却及所需雾化增湿的场所。

The series nozzle has new structure. The type of connection and installation is cartridge sleeve type. It is very easy for centering in installation. The nozzle head can be replaced during operation if the head is worn. Its spraying pattern is flat banding. It has the features of even spraying, large range for adjusting water flow and not being blocked up. It is mainly used for the secondary cooling of the wide face of slab continuous casting machine and the place needing spray and humidification.



喷嘴的安装及性能控制

nozzle installation and performance control



| 产品型号 Model | 气压 (MPa) Atmospheric pressure (MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|---------------|-------------------------------------|--------------------------------|---|----------------------------------|--------------------------------|---|----------------------------------|--------------------------------|---|----------------------------------|--------------------------------|---|---------------------------------------|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | |
| HPZ4.3-85B14 | 0.1 | 2.8 | 11.2 | 0.15 | 3.4 | 12.8 | 0.15 | 2.9 | 16.1 | 0.2 | 3.3 | 18.0 | 85 |
| | 0.15 | 3.8 | 10.1 | 0.2 | 4.3 | 12.3 | 0.2 | 3.8 | 15.0 | 0.3 | 5.1 | 16.3 | |
| | 0.2 | 5.0 | 9.3 | 0.3 | 6.2 | 10.6 | 0.3 | 5.8 | 13.4 | 0.4 | 6.8 | 14.7 | |
| | 0.3 | 6.9 | 7.4 | 0.4 | 7.8 | 8.7 | 0.4 | 7.3 | 11.7 | 0.5 | 8.2 | 13.0 | |
| HPZ4.8-85B14 | 0.1 | 1.9 | 17.3 | 0.15 | 2.4 | 19.5 | 0.15 | 1.45 | 25.9 | 0.2 | 2.0 | 28.4 | 85 |
| | 0.15 | 4.4 | 11.8 | 0.2 | 4.8 | 13.6 | 0.2 | 3.0 | 21.4 | 0.3 | 5.6 | 18.7 | |
| | 0.2 | 7.0 | 8.5 | 0.3 | 9.2 | 7.3 | 0.3 | 7.5 | 12.6 | 0.4 | 9.5 | 12.6 | |
| | 0.3 | 10.7 | 4.9 | 0.4 | 12.4 | 3.9 | 0.4 | 10.9 | 7.6 | 0.5 | 12.5 | 7.3 | |
| HPZ5.3-85B14 | 0.1 | 2.9 | 9.8 | 0.15 | 3.6 | 14.2 | 0.15 | 2.9 | 21.9 | 0.2 | 3.6 | 23.7 | 85 |
| | 0.15 | 4.7 | 8.0 | 0.2 | 5.3 | 12.9 | 0.2 | 4.2 | 17.0 | 0.3 | 6.2 | 21.6 | |
| | 0.2 | 6.4 | 6.8 | 0.3 | 8.2 | 11.6 | 0.3 | 7.4 | 12.7 | 0.4 | 9.1 | 19.8 | |
| | 0.25 | 8.0 | 6.1 | 0.4 | 11.0 | 9.8 | 0.4 | 10.0 | 10.5 | 0.5 | 11.3 | 16.1 | |

| 产品型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|---------------|------------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|--|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | |
| HPZ5.8-85B14 | 0.1 | 1.5 | 28.4 | 0.15 | 2.2 | 31.6 | 0.15 | 0.8 | 41.5 | 0.2 | 1.3 | 46.0 | 85 |
| | 0.15 | 5.2 | 20.9 | 0.2 | 5.8 | 25.2 | 0.2 | 3.0 | 35.2 | 0.3 | 6.2 | 33.1 | |
| | 0.2 | 8.8 | 18.8 | 0.3 | 12.7 | 19.9 | 0.3 | 10.0 | 25.9 | 0.4 | 12.7 | 26.5 | |
| | 0.25 | 12.8 | 11.6 | 0.35 | 15.5 | 15.0 | 0.35 | 12.7 | 21.0 | 0.5 | 17.5 | 15.5 | |
| HPZ4.5-95B14 | 0.1 | 2.5 | 7.9 | 0.15 | 3.1 | 10.4 | 0.15 | 2.5 | 13.8 | 0.2 | 3.0 | 16.0 | 95 |
| | 0.15 | 4.1 | 6.2 | 0.2 | 4.5 | 8.3 | 0.2 | 3.6 | 13.1 | 0.3 | 5.5 | 13.6 | |
| | 0.2 | 5.9 | 5.5 | 0.3 | 7.5 | 7.1 | 0.3 | 6.5 | 10.5 | 0.4 | 8.0 | 11.2 | |
| | 0.3 | 8.8 | 3.0 | 0.4 | 10.0 | 4.3 | 0.4 | 8.9 | 8.0 | 0.5 | 10.0 | 9.6 | |
| HPZ4.6-95B14 | 0.1 | 1.6 | 18.8 | 0.15 | 2.4 | 20.8 | 0.15 | 1.5 | 27.0 | 0.2 | 2.0 | 29.5 | 95 |
| | 0.15 | 4.1 | 13.3 | 0.2 | 4.6 | 15.9 | 0.2 | 3.1 | 22.9 | 0.3 | 5.6 | 20.9 | |
| | 0.2 | 7.0 | 8.7 | 0.3 | 9.6 | 8.2 | 0.3 | 7.7 | 13.3 | 0.4 | 10.0 | 12.7 | |
| | 0.3 | 11.5 | 4.7 | 0.4 | 13.5 | 4.0 | 0.4 | 11.9 | 7.5 | 0.5 | 13.7 | 8.3 | |
| HPZ5.9-95B14 | 0.12 | 1.5 | 30.6 | 0.17 | 2.1 | 34.7 | 0.22 | 2.5 | 39.3 | 0.28 | 4.3 | 35.7 | 95 |
| | 0.15 | 5.1 | 15.6 | 0.2 | 5.9 | 18.8 | 0.25 | 6.3 | 22.9 | 0.3 | 7.1 | 24.5 | |
| | 0.17 | 8.8 | 8.2 | 0.23 | 11.5 | 7.1 | 0.28 | 12.2 | 10.4 | 0.33 | 12.3 | 13.6 | |
| HPZ4.6-115B14 | 0.1 | 2.9 | 11.2 | 0.15 | 3.5 | 13.1 | 0.15 | 3.1 | 16.2 | 0.2 | 3.7 | 18.4 | 115 |
| | 0.15 | 4.1 | 10.2 | 0.2 | 4.6 | 12.5 | 0.2 | 4.0 | 15.4 | 0.3 | 5.4 | 16.8 | |
| | 0.2 | 5.2 | 8.9 | 0.3 | 6.5 | 10.6 | 0.3 | 6.0 | 13.8 | 0.4 | 7.1 | 15.4 | |
| | 0.3 | 7.1 | 7.7 | 0.4 | 8.0 | 8.9 | 0.4 | 7.6 | 12.0 | 0.5 | 8.4 | 13.5 | |
| HPZ5.0-115B14 | 0.1 | 2.7 | 13.5 | 0.15 | 3.4 | 15.9 | 0.15 | 2.7 | 20.5 | 0.2 | 3.3 | 22.8 | 115 |
| | 0.15 | 4.5 | 11.0 | 0.2 | 5.0 | 13.6 | 0.2 | 4.1 | 18.2 | 0.3 | 5.9 | 18.6 | |
| | 0.2 | 6.15 | 9.1 | 0.3 | 7.9 | 10.2 | 0.3 | 6.9 | 14.4 | 0.4 | 8.2 | 15.4 | |
| | 0.3 | 8.9 | 5.6 | 0.4 | 10.1 | 7.2 | 0.4 | 9.1 | 10.5 | 0.5 | 10.3 | 11.9 | |
| HPZ5.3-115B14 | 0.1 | 2.4 | 16.9 | 0.15 | 3.1 | 19.8 | 0.15 | 2.0 | 26.0 | 0.2 | 2.6 | 28.6 | 115 |
| | 0.15 | 4.9 | 12.3 | 0.2 | 5.3 | 15.2 | 0.2 | 3.7 | 22.1 | 0.3 | 6.3 | 20.2 | |
| | 0.2 | 7.3 | 9.2 | 0.3 | 9.4 | 9.1 | 0.3 | 7.9 | 14.7 | 0.4 | 9.7 | 14.4 | |
| | 0.3 | 11.0 | 4.4 | 0.4 | 12.6 | 5.2 | 0.4 | 11.2 | 9.4 | 0.5 | 12.7 | 9.7 | |
| HPZ5.8-115B14 | 0.1 | 1.0 | 25.6 | 0.15 | 1.6 | 28.4 | 0.2 | 2.0 | 32.2 | 0.25 | 2.4 | 35.5 | 115 |
| | 0.15 | 5.2 | 12.4 | 0.2 | 5.8 | 14.7 | 0.25 | 6.4 | 17.2 | 0.3 | 6.8 | 20.5 | |
| | 0.2 | 10.4 | 5.1 | 0.25 | 10.6 | 7.6 | 0.3 | 11.0 | 9.7 | 0.35 | 11.2 | 12.0 | |

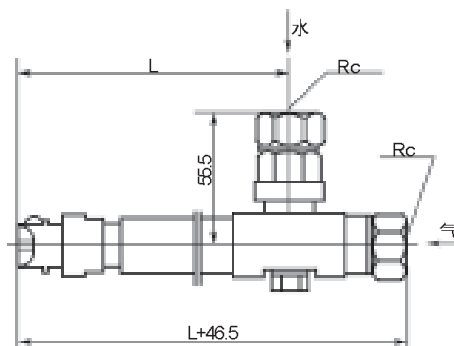
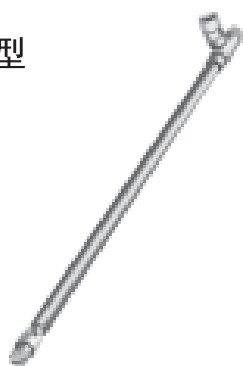
| 产品型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|-------------------|------------------------------------|--------------------------------|---|----------------------------------|--------------------------------|---|----------------------------------|--------------------------------|---|----------------------------------|--------------------------------|---|--|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | |
| HPZ2.5-95B14 | 0.1 | 1.7 | 3.2 | 0.15 | 2.0 | 3.7 | 0.15 | 1.9 | 5.2 | 0.2 | 2.2 | 6.6 | 95 |
| | 0.15 | 2.2 | 2.5 | 0.2 | 2.5 | 3.6 | 0.2 | 2.3 | 5.0 | 0.3 | 3.0 | 6.4 | |
| | 0.2 | 2.6 | 2.4 | 0.3 | 3.3 | 3.5 | 0.3 | 3.1 | 4.9 | 0.4 | 3.6 | 6.2 | |
| | 0.3 | 3.4 | 2.2 | 0.4 | 3.9 | 3.4 | 0.4 | 3.7 | 4.7 | 0.5 | 4.2 | 6.0 | |
| HPZ2.9-95B14 | 0.1 | 1.8 | 4.1 | 0.15 | 2.2 | 6.1 | 0.15 | 1.8 | 7.9 | 0.2 | 2.1 | 9.2 | 95 |
| | 0.15 | 2.6 | 3.8 | 0.2 | 2.9 | 5.7 | 0.2 | 2.5 | 7.5 | 0.3 | 3.4 | 8.8 | |
| | 0.2 | 3.3 | 3.3 | 0.3 | 4.2 | 4.5 | 0.3 | 3.8 | 6.7 | 0.4 | 4.5 | 8.0 | |
| | 0.3 | 4.7 | 2.7 | 0.4 | 5.3 | 3.3 | 0.4 | 5.0 | 5.6 | 0.5 | 5.5 | 6.2 | |
| HPZ1.8-95B14 | 0.15 | 1.6 | 7.3 | 0.2 | 1.8 | 9.0 | 0.25 | 1.8 | 13.1 | 0.3 | 2.2 | 15.0 | 95 |
| | 0.2 | 2.8 | 5.4 | 0.3 | 3.8 | 6.8 | 0.3 | 3.0 | 10.7 | 0.4 | 3.8 | 10.8 | |
| | 0.3 | 4.4 | 3.6 | 0.4 | 5.0 | 4.9 | 0.4 | 4.5 | 8.2 | 0.5 | 5.1 | 8.6 | |
| | 0.4 | 5.7 | 2.4 | 0.5 | 6.2 | 3.6 | 0.5 | 5.7 | 6.2 | 0.6 | 6.3 | 6.8 | |
| HPZ2.4-95B14 | 0.15 | 2.3 | 6.5 | 0.2 | 2.4 | 8.8 | 0.25 | 2.6 | 9.9 | 0.3 | 2.7 | 13.0 | 95 |
| | 0.2 | 3.9 | 4.1 | 0.3 | 5.3 | 4.2 | 0.3 | 4.0 | 7.7 | 0.4 | 5.5 | 8.6 | |
| | 0.25 | 5.3 | 2.7 | 0.35 | 6.4 | 2.9 | 0.4 | 6.4 | 4.8 | 0.5 | 7.3 | 5.6 | |
| | | | | 0.4 | 7.3 | 2.3 | 0.5 | 8.2 | 3.0 | 0.6 | 8.9 | 3.8 | |
| HPZ3.4-95B14 | 0.1 | 1.6 | 10.0 | 0.15 | 2.2 | 11.3 | 0.15 | 1.6 | 14.9 | 0.2 | 2.0 | 16.2 | 95 |
| | 0.15 | 3.0 | 8.2 | 0.2 | 3.4 | 10.1 | 0.2 | 2.5 | 13.3 | 0.3 | 3.9 | 13.3 | |
| | 0.2 | 4.4 | 6.7 | 0.3 | 5.4 | 6.2 | 0.3 | 4.7 | 10.5 | 0.4 | 5.7 | 11.1 | |
| | 0.3 | 6.3 | 3.3 | 0.4 | 7.2 | 5.5 | 0.4 | 6.5 | 6.8 | 0.5 | 7.3 | 8.6 | |
| HPZ3.6-95B14 | 0.1 | 0.9 | 19.9 | 0.15 | 1.1 | 21.8 | 0.2 | 1.4 | 24.4 | 0.25 | 1.9 | 26.4 | 95 |
| | 0.15 | 3.3 | 10.0 | 0.2 | 3.6 | 12.1 | 0.3 | 6.8 | 8.0 | 0.3 | 4.2 | 16.1 | |
| | 0.2 | 6.8 | 3.0 | 0.3 | 9.5 | 3.3 | 0.35 | 9.5 | 4.0 | 0.4 | 9.8 | 4.9 | |
| | | | | | | | | | | | | | |
| Z2.7-90 × 30B14 | 0.1 | 2.0 | 5.2 | 0.15 | 2.4 | 6.4 | 0.15 | 2.3 | 7.5 | 0.2 | 2.3 | 8.6 | 90 × 30 |
| | 0.15 | 2.5 | 5.1 | 0.2 | 2.7 | 6.5 | 0.2 | 2.5 | 7.4 | 0.3 | 2.8 | 8.4 | |
| | 0.2 | 2.9 | 5.1 | 0.3 | 3.4 | 6.2 | 0.3 | 3.1 | 7.4 | 0.4 | 3.4 | 8.4 | |
| | 0.3 | 3.6 | 5.0 | 0.4 | 3.9 | 6.2 | 0.4 | 3.6 | 7.3 | 0.5 | 3.8 | 8.5 | |
| HPZ3.8-90 × 30B14 | 0.15 | 3.1 | 18.4 | 0.2 | 3.8 | 16.5 | 0.25 | 4.1 | 19.9 | 0.3 | 4.5 | 22.9 | 90 × 30 |
| | 0.2 | 4.6 | 11.5 | 0.3 | 5.9 | 13.1 | 0.3 | 5.2 | 18.2 | 0.4 | 6.5 | 19.8 | |
| | 0.3 | 6.6 | 8.6 | 0.4 | 7.9 | 10.3 | 0.4 | 7.2 | 15.2 | 0.5 | 8.2 | 16.4 | |
| | 0.4 | 8.7 | 6.2 | 0.5 | 9.4 | 8.3 | 0.5 | 8.8 | 12.2 | 0.6 | 9.9 | 13.9 | |

喷雾特性及用途:

该系列喷嘴结构独特，是直交内混式喷雾喷嘴，其喷雾形状为扇形，整个雾区分布非常均匀，冲击力较高，水量调节范围极宽，调节比可达1:25，耗气量比同类产品低，喷头的不同定位方向可以使喷水面平行喷雾或垂直喷雾，使用中更换磨损的喷头也十分方便；该产品是浇铸不同断面、不同钢种和拉速变化时的专用喷嘴，主要适用于板坯连铸的二次冷却，尤其是特钢连铸。

This series nozzle has special structure. It is a direct-interesection internal mix nozzle. Its spraying pattern is flat. The drops distribution of the whole spraying area is very even. The impact is bigger. The adjusting range of water flow is very large. The adjusting ratio can reach 1:25. Gas consumption is lower than the product of the same type. The different setting directions of nozzle head can make parallel spray and vertical spray. It is very easy to replace the worn nozzle head during operation. The product is especially suitable for casting different sections and steels and while the change of pulling speed is big. It is mainly used for the secondary cooling of slab continuous casting machine, especially for special steel.

B15 型



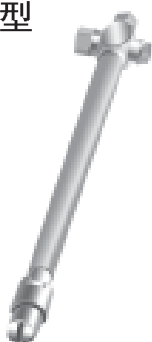
| 产品型号 Model | 气压 (MPa) Atmospheric pressure (MPa) | | | | | | | | | 喷射角 (°) Spray angle (degree) | Rc |
|---------------|-------------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|---------------------------------------|-----|
| | 0.2 | | | 0.3 | | | 0.4 | | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | | |
| HPZ2.0-96B15 | 0.2 | 2.0 | 14.9 | 0.2 | 1.2 | 24.7 | 0.3 | 1.7 | 29.5 | 96 | 3/8 |
| | 0.3 | 3.1 | 11.4 | 0.3 | 2.2 | 20.6 | 0.4 | 2.5 | 26.3 | | |
| | 0.4 | 4.5 | 8.0 | 0.4 | 3.3 | 18.6 | 0.5 | 3.5 | 23.4 | | |
| | 0.5 | 5.5 | 6.1 | 0.5 | 4.6 | 13.0 | 0.6 | 4.7 | 18.6 | | |
| | 0.6 | 6.3 | 5.6 | 0.6 | 5.6 | 11.6 | | | | | |
| HPZ1.0-120B15 | 0.2 | 1.0 | 7.4 | 0.2 | 0.9 | 11.7 | 0.2 | 0.8 | 15.3 | 120 | 3/8 |
| | 0.3 | 1.2 | 7.2 | 0.3 | 1.1 | 11.4 | 0.3 | 1.0 | 15.0 | | |
| | 0.4 | 1.4 | 7.1 | 0.4 | 1.3 | 11.3 | 0.4 | 1.2 | 14.9 | | |
| | 0.5 | 1.6 | 6.9 | 0.5 | 1.5 | 10.9 | 0.5 | 1.4 | 14.8 | | |
| | 0.6 | 1.8 | 6.8 | 0.6 | 1.7 | 10.7 | 0.6 | 1.6 | 14.3 | | |

注：尺寸L 可根据用户需要给定

Note: Size L can be changed according to requirement of users.

| Model | 0.3MPa Atmospheric pressure is 0.3MPa | | | Rc |
|----------------|--|---------------------------|-------------------------|-----|
| | Water pressure is 0.7MPa | | | |
| | Q _A (Nm ³ /h) | Q _W (L/min) | Spray angle (degree) | |
| HPZ2.4-60B15 | 6.78 | 4.9 | 60 | |
| HPZ2.4-75B15 | 6.78 | 4.9 | 75 | |
| HPZ2.4-120B15 | 6.78 | 4.9 | 120 | |
| HPZ3.5-105B15 | 10.2 | 7.6 | 105 | |
| HPZ3.5-120B15 | 10.2 | 7.6 | 120 | |
| HPZ3.5-135B15 | 10.2 | 7.6 | 135 | |
| HPZ4.2-60B16 | 12.72 | 9.5 | 60 | |
| HPZ4.2-70B16 | 12.72 | 9.5 | 70 | |
| HPZ4.2-85B16 | 12.72 | 9.5 | 85 | |
| HPZ4.2-90B16 | 12.72 | 9.5 | 90 | |
| HPZ4.2-95B16 | 12.72 | 9.5 | 95 | |
| HPZ4.2-100B16 | 12.72 | 9.5 | 100 | |
| HPZ4.2-110B16 | 12.72 | 9.5 | 110 | |
| HPZ4.2-120B16 | 12.72 | 9.5 | 120 | |
| HPZ5.7-70B16 | 15.3 | 11.4 | 70 | |
| HPZ5.7-90B16 | 15.3 | 11.4 | 90 | |
| HPZ5.7-95B16 | 15.3 | 11.4 | 95 | |
| HPZ5.7-120B16 | 15.3 | 11.4 | 120 | 3/8 |
| HPZ6.7-90B16 | 20.4 | 15.1 | 90 | |
| HPZ6.7-110B16 | 20.4 | 15.1 | 110 | |
| HPZ6.7-120B16 | 20.4 | 15.1 | 120 | |
| HPZ6.7-125B16 | 20.4 | 15.1 | 125 | |
| HPZ9.0-50B16 | 25.5 | 18.9 | 50 | |
| HPZ9.0-70B16 | 25.5 | 18.9 | 70 | |
| HPZ9.0-80B16 | 25.5 | 18.9 | 80 | |
| HPZ9.0-90B16 | 25.5 | 18.9 | 90 | |
| HPZ9.0-95B16 | 25.5 | 18.9 | 95 | |
| HPZ9.0-110B16 | 25.5 | 18.9 | 110 | |
| HPZ9.0-115B16 | 25.5 | 18.9 | 115 | |
| HPZ9.0-120B16 | 25.5 | 18.9 | 120 | |
| HPZ9.0-125B16 | 25.5 | 18.9 | 125 | |
| HPZ9.0-135B16 | 25.5 | 18.9 | 135 | |
| HPZ10.9-110B17 | 33.12 | 25 | 110 | |
| HPZ10.9-120B17 | 33.12 | 25 | 120 | |
| HPZ14.1-60B17 | 40.8 | 30 | 60 | |
| HPZ14.1-110B17 | 40.8 | 30 | 110 | |
| HPZ14.1-120B17 | 40.8 | 30 | 120 | |

B16 型



B17 型



B18 型



B19 型



B20 型



B21 型



| 产品型号 Model | 气压为 0.3MPa Atmospheric pressure is 0.3MPa | | | Rc |
|-----------------|--|---------------------------|-----------------------------------|-----|
| | 水压为 0.7MPa Water pressure is 0.7MPa | | | |
| | Q _A (Nm ³ /h) | Q _W (L/min) | 喷射角(°) Spray angle (degree) | |
| HPZ15.0-110B18 | 45.9 | 34 | 110 | |
| HPZ15.0-120B18 | 45.9 | 34 | 120 | |
| HPZ15.0-135B18 | 45.9 | 34 | 135 | |
| HPZ16.0-110B18 | 53.52 | 40 | 110 | 1/2 |
| HPZ16.0-120B18 | 53.52 | 40 | 120 | |
| HPZ17.3-120B18 | 61.14 | 45 | 120 | |
| HPZ17.3-135B18 | 61.14 | 45 | 135 | |
| HPZ10.9-70B19 | 33.12 | 25 | 70 | |
| HPZ10.9-80B19 | 33.12 | 25 | 80 | |
| HPZ10.9-90B19 | 33.12 | 25 | 90 | |
| HPZ10.9-110B19 | 33.12 | 25 | 110 | |
| HPZ10.9-120B19 | 33.12 | 25 | 120 | |
| HPZ10.9-135B19 | 33.12 | 25 | 135 | 3/8 |
| HPZ14.1-60B19 | 40.8 | 30 | 60 | |
| HPZ14.1-110B19 | 40.8 | 30 | 110 | |
| HPZ14.1-115B19 | 40.8 | 30 | 115 | |
| HPZ14.1-120B19 | 40.8 | 30 | 120 | |
| HPZ14.1-125B19 | 40.8 | 30 | 125 | |
| HPZ15.0-105B20 | 45.9 | 34 | 105 | |
| HPZ15.0-110B20 | 45.9 | 34 | 110 | |
| HPZ15.0-120B20 | 45.9 | 34 | 120 | |
| HPZ15.0-125B20 | 45.9 | 34 | 125 | |
| HPZ15.0-135B20 | 45.9 | 34 | 135 | |
| HPZ16.0-105B20 | 53.52 | 40 | 105 | |
| HPZ16.0-110B20 | 53.52 | 40 | 110 | 1/2 |
| HPZ16.0-120B20 | 53.52 | 40 | 120 | |
| HPZ16.0-125B20 | 53.52 | 40 | 125 | |
| HPZ17.0-115B20 | 61.14 | 45 | 115 | |
| HPZ17.0-120B20 | 61.14 | 45 | 120 | |
| HPZ17.0-125B20 | 61.14 | 45 | 125 | |
| HPZ17.0-135B20 | 61.14 | 45 | 135 | |
| HPZ24.9-125B20 | 76.44 | 57 | 125 | |
| HPZ26.5-125B20 | 86.64 | 64 | 125 | |
| HPZ3.5-90×30B21 | 11.88 | 7.6 | 90×30 | |
| HPZ9.0-60×30B21 | 29.7 | 18.9 | 60×30 | 3/8 |
| HPZ9.0-90×30B21 | 29.7 | 18.9 | 90×30 | |

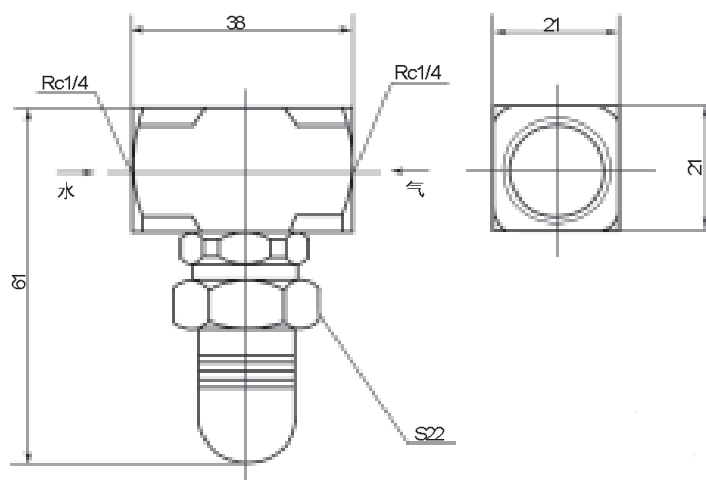
喷雾特性及用途:

该类喷嘴的喷口为扁平形，装在内部的气水芯是控制气水雾化喷嘴的水量、气量的主要构件。喷嘴的雾化工况良好、粒度小、冷却均匀，尤其对小断面的连铸坯，使用效果更佳。该类喷嘴的制造精度较高，小流量的喷嘴对介质的杂质粒度要求较严。

Spray Feature and Application:

The aperture of the nozzle is flat. The air water core equipped inside the nozzle is the key element to control the water and air volume of air water atomized spraying nozzle. The atomization of nozzle is very good. The drop size is small and even, the effect is better, especially to the continuous casting slab of small section. The fabrication precision of the nozzle is higher. The nozzle of small flow has the hard demands to the impurity particle size of medium.

B22 型



| 产品型号 Model | 性能参数 capability parameter | | | | 喷射角 (°) Spray angle (degree) |
|----------------|---------------------------|-------------|----------------------------|---------------|--|
| | 压力 pressure | | 流量 flow | | |
| | PA (MPa) | PW (MPa) | QA (Nm ³ /h) | QW (L/min) | |
| HPZ1.9-90B22 | 0.28 | 0.26 | 5.1 | 1.89 | 90 |
| HPZ3.8-90B22 | 0.28 | 0.23 | 16.5 | 3.79 | 90 |
| HPZ5.7-90B22 | 0.28 | 0.24 | 17.8 | 5.68 | 90 |
| HPZ10.6-90B22 | 0.28 | 0.41 | 10.5 | 10.60 | 90 |
| HPZ5.7-120B22 | 0.28 | 0.24 | 17.8 | 5.68 | 120 |
| HPZ10.6-120B22 | 0.28 | 0.41 | 9.3 | 10.6 | 120 |

注：用户对性能参数及结构尺寸有特殊要求，订货时请注明。

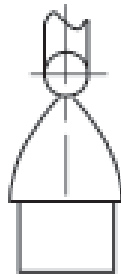
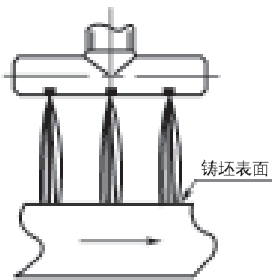
Note: If users have special requirements for the performance parameters, structure and size, please specify in ordering.

喷雾特性及用途:

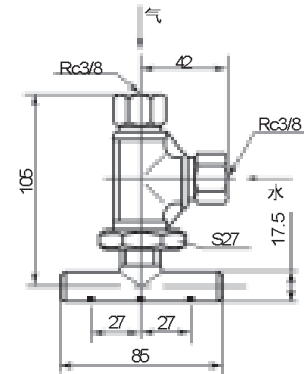
该类喷嘴的接头体接出的喷管有多个喷口，安装简单、灵活方便、占用的空间小，主要用于方坯和圆坯连铸机上二次冷却，也可用于化学药品喷射及纺织，造纸等增湿场所。

Spray Feature and Application:

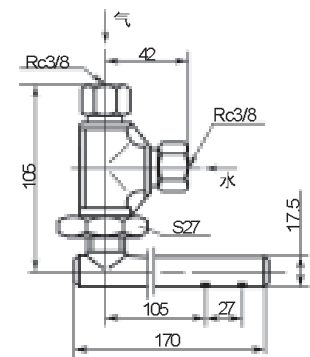
The spray pipe connected by the connector body of these nozzles has several spray apertures. It has the feature of easy installation and convenience and occupying a small space. It is mainly used for the secondary cooling of continuous casting machine for square and round billet/bloom and also for the spray of chemical medicines, the humidification of textile and paper-making, etc.



B23 型



B24 型



| 产品型号 Model | 气压 (MPa) Atmospheric pressure (MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|---------------|-------------------------------------|-----------------------------|--------------------------|-------------------------------|-----------------------------|--------------------------|-------------------------------|-----------------------------|--------------------------|-------------------------------|-----------------------------|--------------------------|---------------------------------------|
| | 0.2 | | | 0.25 | | | 0.3 | | | 0.35 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | |
| HPZ2.9-70B23 | 0.1 | 2.11 | 3.57 | 0.1 | 1.92 | 3.84 | 0.1 | 1.76 | 4.10 | 0.1 | 1.68 | 4.29 | 70 |
| | 0.2 | 2.87 | 3.50 | 0.2 | 2.77 | 3.78 | 0.2 | 2.68 | 4.04 | 0.2 | 2.58 | 4.25 | |
| | 0.3 | 3.70 | 3.40 | 0.3 | 3.56 | 3.72 | 0.3 | 3.44 | 4.02 | 0.3 | 3.35 | 4.23 | |
| | 0.4 | 4.50 | 3.30 | 0.4 | 4.32 | 3.64 | 0.4 | 4.18 | 3.95 | 0.4 | 4.04 | 4.20 | |
| | 0.5 | 5.16 | 3.20 | 0.5 | 5.00 | 3.55 | 0.5 | 4.86 | 3.89 | 0.5 | 4.73 | 4.16 | |
| | 0.6 | 5.67 | 3.10 | 0.6 | 5.53 | 3.46 | 0.6 | 5.40 | 3.82 | 0.6 | 5.30 | 4.10 | |
| | 0.7 | 6.11 | 3.01 | 0.7 | 5.99 | 3.40 | 0.7 | 5.91 | 3.77 | 0.7 | 5.83 | 4.00 | |
| HPZ3.2-65B24 | 0.1 | 2.43 | 3.59 | 0.1 | 2.33 | 3.86 | 0.1 | 2.23 | 4.16 | 0.1 | 2.17 | 4.32 | 65 |
| | 0.2 | 3.22 | 3.58 | 0.2 | 3.15 | 3.85 | 0.2 | 3.07 | 4.15 | 0.2 | 3.00 | 4.31 | |
| | 0.3 | 4.06 | 3.57 | 0.3 | 4.00 | 3.83 | 0.3 | 3.91 | 4.14 | 0.3 | 3.86 | 4.30 | |
| | 0.4 | 4.73 | 3.56 | 0.4 | 4.67 | 3.82 | 0.4 | 4.58 | 4.13 | 0.4 | 4.53 | 4.29 | |
| | 0.5 | 5.27 | 3.52 | 0.5 | 5.21 | 3.81 | 0.5 | 5.17 | 4.12 | 0.5 | 5.14 | 4.24 | |

注：用户对性能参数及结构尺寸有特殊要求，订货时请注明。

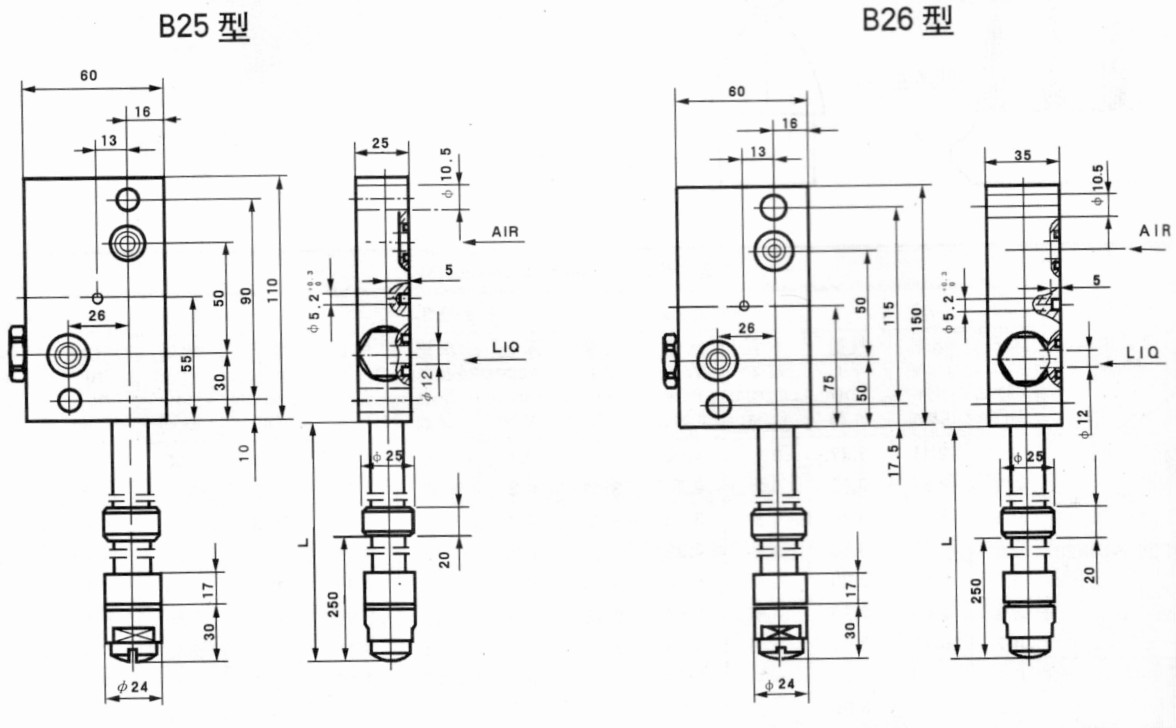
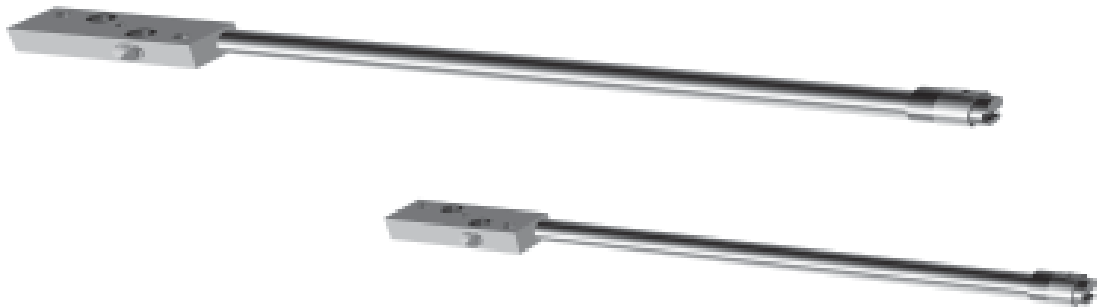
Note: If users have special requirements for the performance parameters, structure and size, please specify in ordering.

喷雾特性及用途:

该形式喷嘴主体采用轧制铜材，其结构新颖，连接方式为法兰式，具有良好密封耐磨性，安装对中十分方便，喷头的不同定位方向，可以使喷水面保持平行或垂直，它的喷雾形式为扇形，覆盖面广、分布均匀，主要应用于方、板坯连铸的二次冷却，尤其浇铸特殊钢种。

Spray Feature and Application:

The main body of this kind of nozzle is made of rolled copper in new structure. It is connected by flange with good tightness and abrasability. It is easy to install and center. The different orientations of the nozzle can keep the water pray level parallel or vertical. Its spray pattern is flat with wide coverage and even distribution. It is mainly used as ftercooling of continuous casting of square and plate billets, especially in special steel casting.



注：尺寸L 可根据用户需求给定。

Note: size L can be changed according to requirement of users.

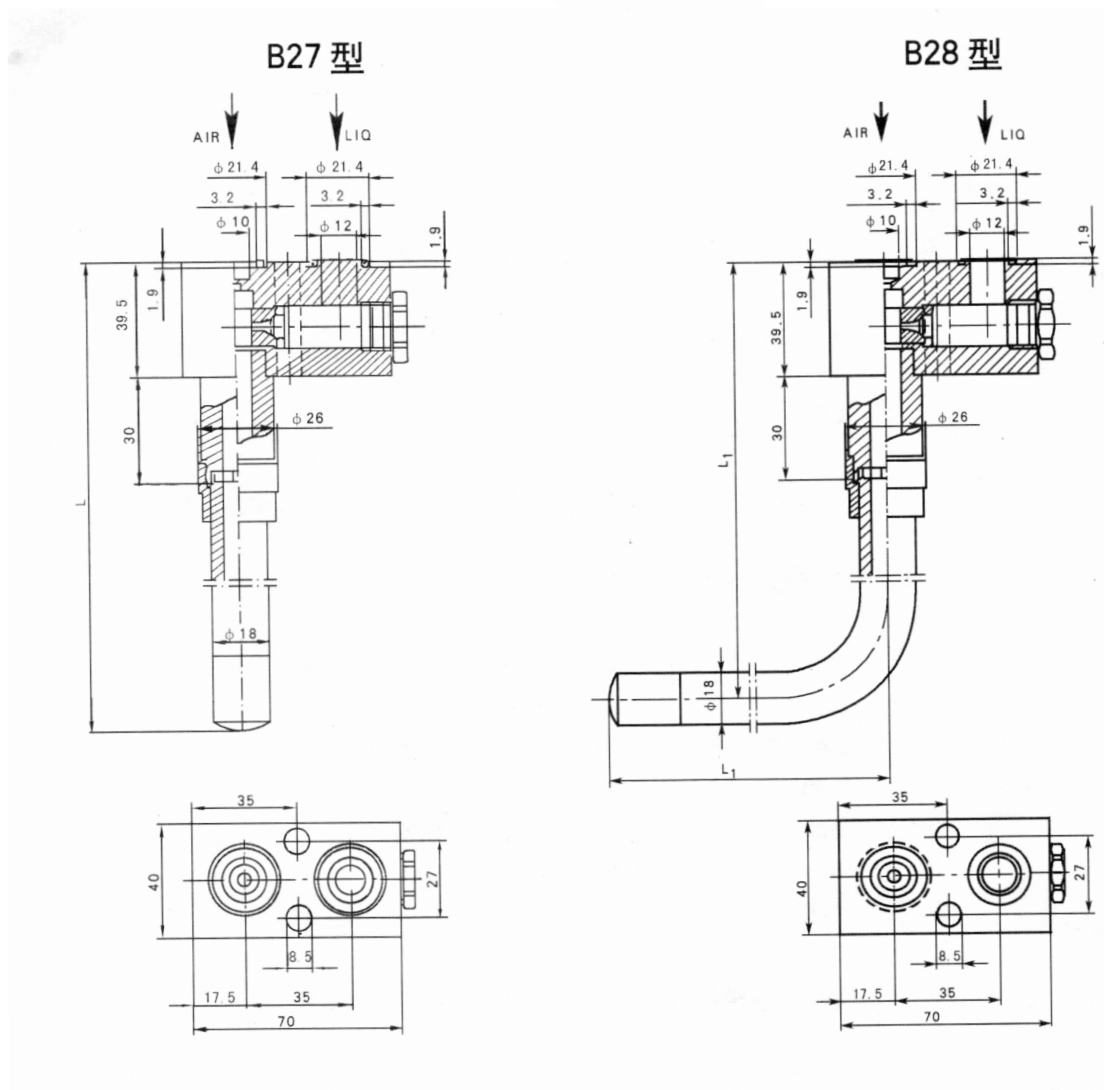
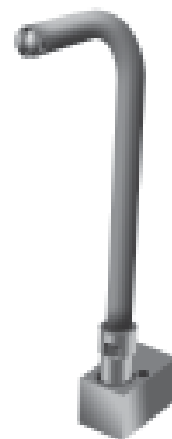
| 产品型号 Model | 气压 (Mpa) Atmospheric pressure | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|-------------------|----------------------------------|--------------------------------|---|----------------------------------|--------------------------------|---|----------------------------------|--------------------------------|---|---------------------------------------|
| | 0.1 | | | 0.2 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | |
| HPZ1.25-65B25-(L) | 0.1 | 0.95 | 0.71 | 0.1 | 0.58 | 1.91 | | | | 65 |
| | 0.2 | 1.53 | 0.57 | 0.2 | 1.25 | 1.73 | 0.2 | 1.08 | 3.0 | |
| | 0.3 | 2.1 | 0.42 | 0.3 | 1.8 | 1.39 | 0.3 | 1.57 | 2.6 | |
| | | | | 0.4 | 2.23 | 1.04 | 0.4 | 2.03 | 2.4 | |
| | | | | 0.5 | 2.62 | 0.87 | 0.5 | 2.42 | 2.2 | |
| | | | | 0.6 | 2.97 | 0.69 | 0.6 | 2.75 | 2.0 | |
| HPZ1.8-88B25-(L) | 0.1 | 1.25 | 4.67 | 0.1 | 0.92 | 8.14 | | | | 88 |
| | 0.2 | 2.07 | 4.1 | 0.2 | 1.8 | 7.45 | 0.2 | 1.47 | 8.06 | |
| | 0.3 | 2.85 | 3.68 | 0.3 | 2.53 | 6.58 | 0.3 | 2.2 | 7.5 | |
| | | | | 0.4 | 3.12 | 5.72 | 0.4 | 2.8 | 6.51 | |
| | | | | 0.5 | 3.67 | 5.02 | 0.5 | 3.37 | 5.37 | |
| | | | | 0.6 | 4.17 | 4.16 | 0.6 | 3.77 | 4.67 | |
| HPZ2.8-102B25-(L) | 0.1 | 2.25 | 3.8 | 0.1 | 1.32 | 7.0 | | | | 102 |
| | 0.2 | 3.83 | 3.5 | 0.2 | 2.83 | 5.9 | 0.2 | 2.12 | 8.9 | |
| | 0.3 | 5.2 | 3.1 | 0.3 | 4.33 | 5.0 | 0.3 | 3.5 | 7.8 | |
| | | | | 0.4 | 5.53 | 4.3 | 0.4 | 4.68 | 6.5 | |
| | | | | 0.5 | 6.58 | 3.5 | 0.5 | 5.8 | 5.3 | |
| | | | | 0.6 | 7.47 | 3.0 | 0.6 | 6.8 | 4.5 | |
| HPZ3.3-76B25-(L) | 0.1 | 2.57 | 4.24 | 0.1 | 1.42 | 7.62 | | | | 76 |
| | 0.2 | 4.3 | 3.96 | 0.2 | 3.3 | 6.92 | 0.2 | 2.45 | 11.2 | |
| | 0.3 | 5.67 | 3.4 | 0.3 | 4.7 | 5.88 | 0.3 | 3.8 | 10.0 | |
| | | | | 0.4 | 5.97 | 5.2 | 0.4 | 5.15 | 8.8 | |
| | | | | 0.5 | 7.13 | 4.5 | 0.5 | 6.32 | 8.0 | |
| | | | | | | | 0.6 | 7.33 | 6.8 | |

| 产品型号 Model | 气压 (Mpa) Atmospheric pressure | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|-------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|--|
| | 0.1 | | | 0.2 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | |
| HPZ0.8-85B25-(L) | 0.1 | 0.67 | 1.65 | | | | | | | 85 |
| | 0.15 | 0.95 | 2.3 | | | | | | | |
| | 0.2 | 1.22 | 0.79 | 0.2 | 0.75 | 2.52 | | | | |
| | | | | 0.3 | 1.27 | 2.04 | 0.3 | 0.88 | 3.61 | |
| | | | | 0.4 | 1.77 | 1.46 | 0.4 | 1.42 | 3.31 | |
| | | | | 0.5 | 2.23 | 0.82 | 0.5 | 1.82 | 2.54 | |
| | | | | | | | 0.6 | 2.15 | 1.64 | |
| HPZ1.4-120B25-(L) | | | | | | | 0.7 | 2.58 | 1.39 | 120 |
| | 0.1 | 0.95 | 2.5 | | | | | | | |
| | 0.15 | 1.38 | 2.4 | | | | | | | |
| | 0.2 | 2.07 | 2.3 | 0.2 | 1.87 | 2.8 | 0.2 | 1.73 | 3.1 | |
| | | | | 0.3 | 2.38 | 2.7 | 0.3 | 2.22 | 3.0 | |
| | | | | 0.4 | 2.85 | 2.6 | 0.4 | 2.68 | 3.0 | |
| HPZ5.0-95B25-(L) | | | | | | | 0.5 | 3.07 | 2.9 | 95 |
| | 0.1 | 3.75 | 8.69 | 0.1 | 2.48 | 16.37 | | | | |
| | 0.2 | 6.42 | 6.59 | 0.2 | 5.0 | 14.42 | 0.2 | 3.97 | 20.61 | |
| | 0.3 | 8.48 | 4.71 | 0.3 | 7.3 | 12.91 | 0.3 | 6.07 | 19.6 | |
| | 0.4 | 10.38 | 3.58 | 0.4 | 9.2 | 10.62 | 0.4 | 7.93 | 18.47 | |
| | | | | 0.5 | 10.8 | 9.65 | 0.5 | 9.93 | 16.59 | |
| HPZ6.4-85B25-(L) | | | | | | | 0.6 | 11.38 | 15.34 | 85 |
| | 0.1 | 5.3 | 12.0 | 0.1 | 3.12 | 21.6 | | | | |
| | 0.2 | 8.0 | 9.16 | 0.2 | 6.4 | 20.15 | 0.2 | 5.18 | 29.28 | |
| | 0.3 | 10.45 | 7.7 | 0.3 | 8.98 | 18.36 | 0.3 | 7.65 | 27.75 | |
| | 0.4 | 12.6 | 5.7 | 0.4 | 11.15 | 16.17 | 0.4 | 10.0 | 26.25 | |
| | 0.5 | 14.4 | 4.3 | 0.5 | 13.07 | 14.52 | 0.5 | 11.88 | 23.87 | |
| | | | | | | 0.6 | 13.63 | 22.63 | | |

| 产品型号 Model | 气压 (Mpa) Atmospheric pressure | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|-------------------|----------------------------------|--------------------------------|---|----------------------------------|--------------------------------|---|----------------------------------|--------------------------------|---|---------------------------------------|
| | 0.1 | | | 0.2 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | |
| HPZ4.3-50B25-(L) | 0.05 | 1.73 | 3.7 | | | | | | | 50 |
| | 0.1 | 3.23 | 3.4 | 0.1 | 2.33 | 5.7 | | | | |
| | 0.15 | 4.35 | 2.7 | 0.2 | 4.27 | 4.8 | 0.15 | 2.68 | 7.7 | |
| | | | | 0.3 | 5.85 | 3.9 | 0.2 | 3.48 | 7.5 | |
| | | | | 0.35 | 6.6 | 3.5 | 0.3 | 4.97 | 6.7 | |
| | | | | | | | 0.4 | 6.33 | 5.7 | |
| | | | | | | 0.45 | 7.67 | 4.6 | | |
| HPZ8.1-50B25-(L) | 0.05 | 3.57 | 7.5 | | | | | | | 50 |
| | 0.1 | 6.25 | 6.4 | 0.1 | 4.65 | 12.0 | 0.1 | 3.5 | 16.0 | |
| | 0.15 | 8.28 | 5.3 | 0.2 | 8.1 | 10.2 | 0.2 | 6.73 | 15.3 | |
| | 0.2 | 10.1 | 4.4 | 0.3 | 11.4 | 8.2 | 0.3 | 9.55 | 13.7 | |
| | | | | 0.4 | 14.4 | 6.2 | 0.4 | 12.5 | 12.0 | |
| | | | | 0.5 | 17.4 | 4.2 | 0.5 | 15.3 | 10.0 | |
| | | | | | | 0.6 | 17.6 | 8.3 | | |
| HPZ18.3-90B26-(L) | 0.1 | 13.9 | 17.3 | 0.1 | 11.35 | 29.3 | 0.1 | 9.18 | 39.1 | 90 |
| | 0.2 | 21.4 | 13.2 | 0.2 | 18.3 | 27.8 | 0.2 | 16.1 | 38.6 | |
| | 0.3 | 27.7 | 9.1 | 0.3 | 24.0 | 25.1 | 0.3 | 22.0 | 37.4 | |
| | 0.4 | 32.3 | 5.9 | 0.4 | 29.6 | 22.0 | 0.4 | 27.3 | 35.0 | |
| | | | | 0.5 | 34.4 | 18.0 | 0.5 | 32.0 | 32.0 | |
| | | | | | | | 0.6 | 35.9 | 29.2 | |
| HPZ9.8-90B25-(L) | 0.05 | 4.35 | 8.9 | | | | | | | 90 |
| | 0.1 | 7.28 | 7.9 | 0.1 | 5.6 | 14.1 | 0.1 | 4.4 | 19.3 | |
| | 0.2 | 11.9 | 5.6 | 0.2 | 9.75 | 12.8 | 0.2 | 8.28 | 18.7 | |
| | | | | 0.3 | 13.4 | 10.8 | 0.3 | 11.8 | 17.4 | |
| | | | | 0.4 | 16.4 | 9.0 | 0.4 | 14.8 | 15.6 | |
| | | | | 0.5 | 19.3 | 6.8 | 0.5 | 17.8 | 13.7 | |
| | | | | | | 0.6 | 20.2 | 11.9 | | |

| 产品型号 Model | 气压 (Mpa) Atmospheric pressure | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|------------------|----------------------------------|--------------------------------|---|----------------------------------|--------------------------------|---|----------------------------------|--------------------------------|---|--|
| | 0.1 | | | 0.2 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | |
| HPZ2.1-75B25-(L) | 0.05 | 1.08 | 2.5 | | | | | | | 75 |
| | 0.1 | 1.53 | 2.4 | 0.1 | 1.38 | 2.8 | 0.1 | 1.22 | 3.2 | |
| | 0.2 | 2.27 | 2.3 | 0.2 | 2.08 | 2.8 | 0.2 | 1.87 | 3.1 | |
| | 0.3 | 2.88 | 2.3 | 0.3 | 2.65 | 2.7 | 0.3 | 2.43 | 3.0 | |
| | 0.4 | 3.37 | 2.2 | 0.4 | 3.15 | 2.6 | 0.4 | 2.95 | 3.0 | |
| | 0.5 | 3.82 | 2.2 | 0.5 | 3.6 | 2.6 | 0.5 | 3.4 | 2.9 | |
| | 0.6 | 4.23 | 2.1 | 0.6 | 4.0 | 2.5 | 0.6 | 3.82 | 2.8 | |
| | 0.7 | 4.58 | 2.1 | 0.7 | 4.4 | 2.4 | 0.7 | 4.18 | 2.7 | |
| HPZ1.9-75B25-(L) | 0.05 | 0.95 | 2.5 | | | | | | | 75 |
| | 0.1 | 1.38 | 2.4 | 0.1 | 1.27 | 2.8 | 0.1 | 1.1 | 3.2 | |
| | 0.2 | 2.07 | 2.3 | 0.2 | 1.87 | 2.8 | 0.2 | 1.73 | 3.1 | |
| | 0.3 | 2.57 | 2.3 | 0.3 | 2.38 | 2.7 | 0.3 | 2.22 | 3.0 | |
| | 0.4 | 3.0 | 2.2 | 0.4 | 2.85 | 2.6 | 0.4 | 2.68 | 3.0 | |
| | 0.5 | 3.4 | 2.2 | 0.5 | 3.23 | 2.6 | 0.5 | 3.07 | 2.9 | |
| | 0.6 | 3.77 | 2.1 | 0.6 | 3.58 | 2.5 | 0.6 | 3.43 | 2.8 | |
| | 0.7 | 4.07 | 2.1 | 0.7 | 3.92 | 2.4 | 0.7 | 3.75 | 2.7 | |
| HPZ4.2-75B25-(L) | 0.05 | 2.02 | 5.5 | 0.05 | 1.68 | 7.9 | 0.05 | 1.37 | 9.4 | 75 |
| | 0.1 | 3.03 | 5.3 | 0.1 | 2.7 | 7.8 | 0.1 | 2.37 | 9.4 | |
| | 0.2 | 4.57 | 4.8 | 0.2 | 4.2 | 7.3 | 0.2 | 3.88 | 9.4 | |
| | 0.3 | 5.75 | 4.6 | 0.3 | 5.37 | 6.9 | 0.3 | 5.05 | 9.5 | |
| | 0.4 | 6.73 | 4.4 | 0.4 | 6.4 | 6.2 | 0.4 | 6.08 | 8.9 | |
| | 0.5 | 7.62 | 3.0 | 0.5 | 7.27 | 5.8 | 0.5 | 6.92 | 9.3 | |
| | 0.6 | 8.45 | 3.7 | 0.6 | 8.1 | 5.9 | 0.6 | 7.77 | 8.7 | |
| | 0.7 | 9.2 | 2.9 | 0.7 | 8.83 | 5.6 | 0.7 | 8.53 | 8.4 | |
| HPZ3.6-90B25-(L) | 0.05 | 1.83 | 4.0 | 0.05 | 1.63 | 5.4 | 0.05 | 1.4 | 7.0 | 90 |
| | 0.1 | 2.62 | 3.5 | 0.1 | 2.45 | 5.2 | 0.1 | 2.25 | 6.5 | |
| | 0.2 | 3.83 | 3.4 | 0.2 | 3.62 | 5.4 | 0.2 | 3.43 | 6.2 | |
| | 0.3 | 4.75 | 3.3 | 0.3 | 4.55 | 4.3 | 0.3 | 4.37 | 6.2 | |
| | 0.4 | 5.53 | 3.0 | 0.4 | 5.33 | 4.4 | 0.4 | 5.13 | 6.4 | |
| | 0.5 | 6.23 | 2.6 | 0.5 | 6.02 | 4.8 | 0.5 | 5.83 | 6.2 | |
| | 0.6 | 6.83 | 2.6 | 0.6 | 6.62 | 4.0 | 0.6 | 6.45 | 6.1 | |
| | 0.7 | 7.43 | 2.7 | 0.7 | 7.22 | 4.8 | 0.7 | 7.02 | 6.1 | |

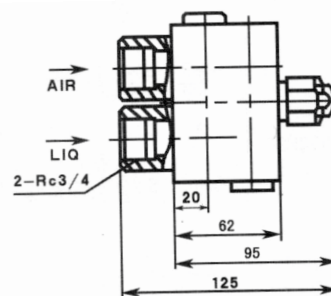
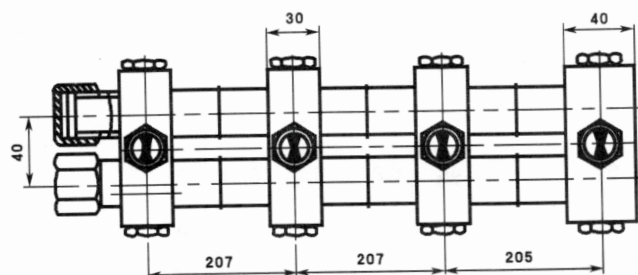
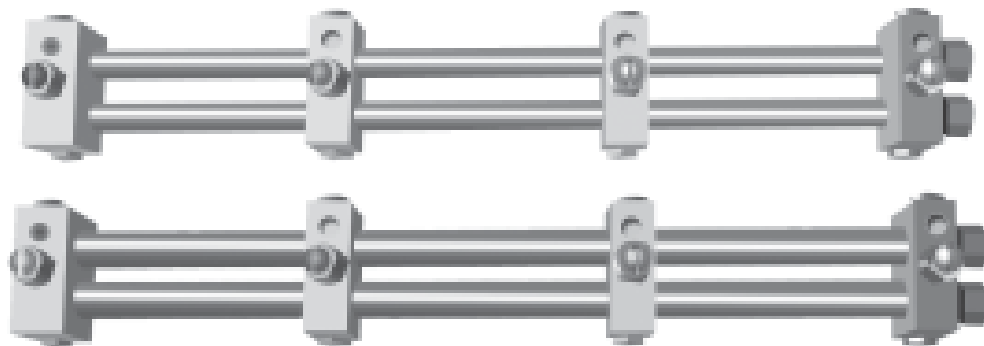
| 产品型号 Model | 气压 (Mpa) Atmospheric pressure | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|-------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|---------------------------------------|
| | 0.1 | | | 0.2 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | |
| HPZ 5.9-90B25-(L) | 0.05 | 2.92 | 6.8 | 0.05 | 2.73 | 9.4 | 0.05 | 2.53 | 11.6 | 90 |
| | 0.1 | 4.2 | 6.8 | 0.1 | 4.0 | 9.4 | 0.1 | 3.85 | 11.6 | |
| | 0.2 | 6.03 | 6.0 | 0.2 | 5.85 | 8.8 | 0.2 | 5.68 | 11.6 | |
| | 0.3 | 7.38 | 4.3 | 0.3 | 7.23 | 8.9 | 0.3 | 7.05 | 11.6 | |
| | 0.4 | 8.53 | 6.3 | 0.4 | 8.38 | 9.2 | 0.4 | 8.25 | 11.6 | |
| | 0.5 | 9.73 | 6.3 | 0.5 | 9.62 | 9.1 | 0.5 | 9.45 | 11.2 | |
| | 0.6 | 10.7 | 5.6 | 0.6 | 10.6 | 8.1 | 0.6 | 10.4 | 11.2 | |
| | 0.7 | 11.6 | 3.4 | 0.7 | 11.5 | 9.0 | 0.7 | 11.3 | 11.8 | |
| HPZ12.3-95B26-(L) | 0.05 | 5.82 | 13.7 | 0.05 | 5.02 | 20.5 | 0.05 | 4.35 | 26.8 | 95 |
| | 0.01 | 8.58 | 13.5 | 0.1 | 7.82 | 20.4 | 0.1 | 7.18 | 26.8 | |
| | 0.2 | 12.85 | 12.7 | 0.2 | 12.28 | 20.2 | 0.2 | 11.55 | 26.7 | |
| | 0.3 | 16.23 | 11.9 | 0.3 | 15.55 | 19.9 | 0.3 | 14.9 | 26.7 | |
| | 0.4 | 19 | 11.2 | 0.4 | 18.3 | 19.6 | 0.4 | 17.8 | 26.6 | |
| | 0.5 | 21.6 | 10.1 | 0.5 | 20.9 | 18.9 | 0.5 | 20.3 | 26.4 | |
| | 0.6 | 23.8 | 9.1 | 0.6 | 22.9 | 18.5 | 0.6 | 22.5 | 26.1 | |
| | 0.7 | 25.7 | 8.9 | 0.7 | 25.1 | 17.8 | 0.7 | 24.4 | 25.6 | |
| HPZ2.8-75B25-(L) | 0.05 | 1.4 | 2.9 | 0.05 | 1.37 | 4.2 | 0.05 | 1.27 | 5.3 | 75 |
| | 0.1 | 2.03 | 4.1 | 0.1 | 1.97 | 4.1 | 0.1 | 1.9 | 5.3 | |
| | 0.2 | 2.9 | 3.6 | 0.2 | 2.82 | 4.5 | 0.2 | 2.77 | 5.3 | |
| | 0.3 | 3.58 | 3.3 | 0.3 | 3.52 | 5.0 | 0.3 | 3.43 | 5.6 | |
| | 0.4 | 4.15 | 3.2 | 0.4 | 4.08 | 5.0 | 0.4 | 4.02 | 5.5 | |
| | 0.5 | 4.63 | 3.8 | 0.5 | 4.58 | 4.6 | 0.5 | 4.52 | 6.0 | |
| | 0.6 | 5.1 | 3.7 | 0.6 | 5.02 | 4.5 | 0.6 | 4.97 | 4.6 | |
| | 0.7 | 5.42 | 3.1 | 0.7 | 5.33 | 5.0 | 0.7 | 5.3 | 4.7 | |
| HPZ7.5-85B26-(L) | 0.05 | 2.58 | 8.3 | 0.05 | 2.97 | 12.6 | 0.05 | 2.37 | 16.9 | 85 |
| | 0.1 | 5.5 | 8.2 | 0.1 | 4.78 | 12.5 | 0.1 | 4.12 | 16.7 | |
| | 0.2 | 8.2 | 7.1 | 0.2 | 7.47 | 12.1 | 0.2 | 6.83 | 16.5 | |
| | 0.3 | 10.5 | 6.2 | 0.3 | 9.63 | 11.8 | 0.3 | 8.98 | 16.4 | |
| | 0.4 | 12.4 | 5.2 | 0.4 | 11.7 | 10.7 | 0.4 | 10.9 | 15.7 | |
| | 0.5 | 14.3 | 4.7 | 0.5 | 13.4 | 10.1 | 0.5 | 12.7 | 15.2 | |
| | 0.6 | 15.7 | 4.3 | 0.6 | 14.9 | 9.9 | 0.6 | 14.3 | 14.8 | |
| | 0.7 | 17.1 | 3.6 | 0.7 | 16.4 | 8.5 | 0.7 | 15.7 | 14.2 | |



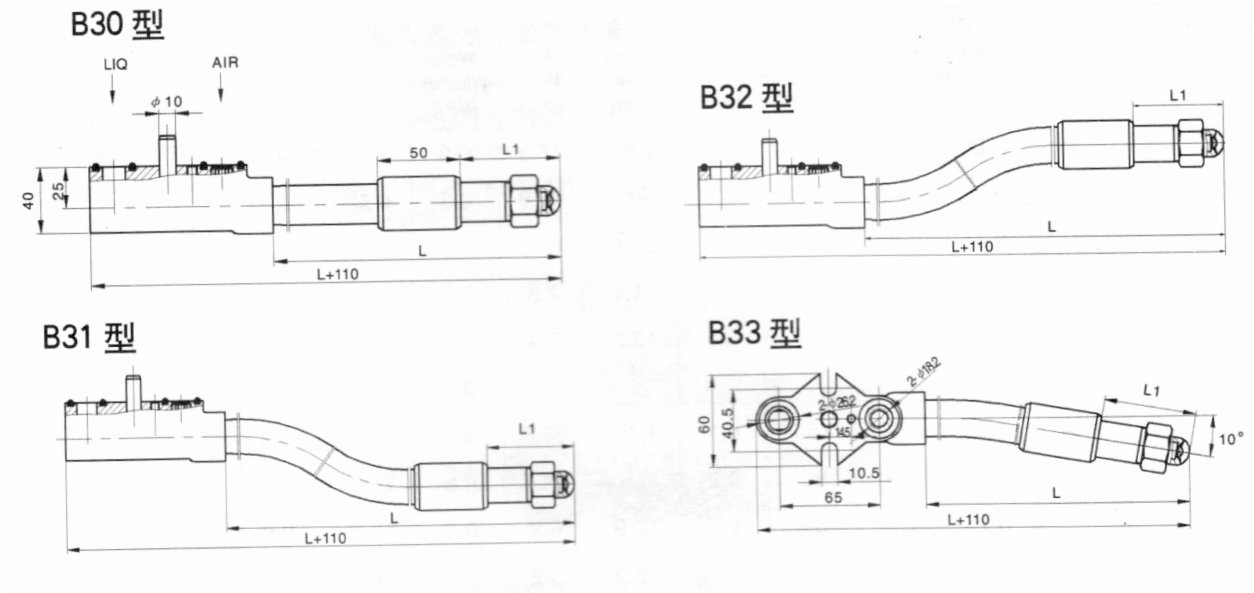
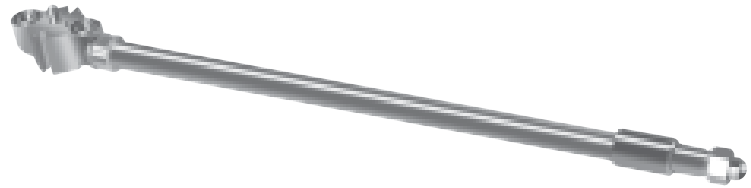
注：尺寸 L_1 、 L_2 可根据用户要求给定。

Note: size L_1 、 L_2 can be changed according to requirement of users.

| 产品型号 Model | 气压 (Mpa) Atmospheric pressure | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|---------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|--|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | |
| HPZ3.0-70B27 | 0.15 | 2.68 | 6.3 | 0.15 | 2.38 | 7.8 | 0.2 | 2.73 | 9.1 | 0.2 | 2.48 | 10.6 | 70 |
| | 0.2 | 3.28 | 5.8 | 0.2 | 3.03 | 7.2 | 0.3 | 3.82 | 8.3 | 0.3 | 3.55 | 9.7 | |
| | 0.3 | 4.35 | 4.6 | 0.3 | 4.07 | 6.5 | 0.4 | 4.7 | 7.9 | 0.4 | 4.47 | 9.2 | |
| | 0.4 | 5.22 | 3.8 | 0.4 | 4.97 | 6.1 | 0.5 | 5.48 | 6.9 | 0.5 | 5.27 | 8.5 | |
| | | | | 0.5 | 5.73 | 4.8 | 0.6 | 6.2 | 6.5 | 0.6 | 5.98 | 8.3 | |
| | | | | | | | | | | 0.7 | 6.53 | 7.1 | |
| HPZ3.0-70B28 | 0.15 | 2.68 | 6.1 | 0.15 | 2.38 | 8.1 | 0.2 | 2.73 | 9.7 | 0.2 | 2.48 | 10.9 | 70 |
| | 0.2 | 3.28 | 6.0 | 0.2 | 3.03 | 7.7 | 0.3 | 3.82 | 9.1 | 0.3 | 3.55 | 10.5 | |
| | 0.3 | 4.35 | 4.8 | 0.3 | 4.07 | 6.8 | 0.4 | 4.7 | 8.4 | 0.4 | 4.47 | 9.8 | |
| | 0.4 | 5.22 | 4.1 | 0.4 | 4.97 | 6.3 | 0.5 | 5.48 | 7.4 | 0.5 | 5.27 | 9.5 | |
| | | | | 0.5 | 5.73 | 6.0 | 0.6 | 6.2 | 6.3 | 0.6 | 5.98 | 8.5 | |
| | | | | | | | | | | 0.7 | 6.53 | 7.7 | |
| HPZ2.7-70B28 | 0.15 | 2.08 | 5.3 | 0.15 | 1.87 | 7.4 | 0.2 | 2.15 | 7.8 | 0.2 | 1.93 | 9.1 | 70 |
| | 0.2 | 2.58 | 4.8 | 0.2 | 2.73 | 6.9 | 0.3 | 2.97 | 7.7 | 0.3 | 2.78 | 9.0 | |
| | 0.3 | 3.37 | 3.9 | 0.3 | 3.17 | 6.4 | 0.4 | 3.65 | 7.5 | 0.4 | 3.47 | 8.3 | |
| | 0.4 | 4.03 | 3.5 | 0.4 | 3.83 | 5.0 | 0.5 | 4.25 | 7.0 | 0.5 | 4.08 | 7.5 | |
| | | | | 0.5 | 4.43 | 5.2 | 0.6 | 4.8 | 5.0 | 0.6 | 4.63 | 6.9 | |
| | | | | | | | | | | 0.7 | 5.13 | 6.5 | |



| 产品型号 Model | 气压 (MPa) Atmospheric pressure | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|--------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|----------------------------------|--------------------------------|-----------------------------|--|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (m³/h) | |
| HPZ29.5- 120B29 | 0.1 | 19.8 | 14.7 | 0.1 | 18.5 | 18.1 | 0.1 | 18.2 | 20.0 | 0.1 | 17.8 | 22.0 | 120 |
| | 0.2 | 30.3 | 14.0 | 0.2 | 29.5 | 17.5 | 0.2 | 28.3 | 19.4 | 0.2 | 27.3 | 21.9 | |
| | 0.3 | 38.7 | 13.3 | 0.3 | 37.3 | 17.3 | 0.3 | 36.3 | 19.2 | 0.3 | 35.3 | 21.8 | |
| | 0.4 | 44.8 | 12.8 | 0.4 | 43.8 | 16.8 | 0.4 | 43.0 | 18.8 | 0.4 | 42.3 | 21.7 | |
| | 0.5 | 50.8 | 12.2 | 0.5 | 49.7 | 16.4 | 0.5 | 48.8 | 18.6 | 0.5 | 48.0 | 21.7 | |
| | 0.6 | 56.3 | 11.4 | 0.6 | 55.3 | 15.8 | 0.6 | 54.5 | 18.3 | 0.6 | 53.3 | 21.6 | |
| | 0.7 | 61.2 | 10.6 | 0.7 | 60.2 | 15.1 | 0.7 | 59.7 | 17.8 | 0.7 | 58.5 | 21.3 | |
| HPZ8.8- 5B29 | 0.1 | 6.9 | 4.8 | 0.1 | 6.4 | 5.8 | 0.1 | 5.7 | 6.7 | 0.1 | 5.1 | 7.5 | 75 |
| | 0.2 | 9.3 | 4.6 | 0.2 | 8.8 | 5.5 | 0.2 | 8.5 | 6.5 | 0.2 | 8.1 | 7.4 | |
| | 0.3 | 11.8 | 4.3 | 0.3 | 11.4 | 5.4 | 0.3 | 11.0 | 6.4 | 0.3 | 10.7 | 7.3 | |
| | 0.4 | 14.0 | 4.1 | 0.4 | 13.5 | 5.2 | 0.4 | 13.2 | 6.2 | 0.4 | 12.8 | 7.2 | |
| | 0.5 | 16.1 | 3.8 | 0.5 | 15.7 | 4.9 | 0.5 | 15.3 | 5.9 | 0.5 | 14.8 | 7.0 | |
| | 0.6 | 17.9 | 3.5 | 0.6 | 17.3 | 4.7 | 0.6 | 17.0 | 5.8 | 0.6 | 16.7 | 6.9 | |
| | 0.7 | 19.5 | 3.2 | 0.7 | 19.2 | 4.5 | 0.7 | 18.7 | 5.6 | 0.7 | 18.3 | 6.6 | |



| 产品型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|-------------------|------------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|--|
| | 0.1 | | | 0.2 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | |
| HPZ3.3-90B30-(L) | 0.05 | 1.45 | 5.4 | 0.1 | 1.7 | 8.7 | 0.2 | 2.55 | 11.9 | 90 |
| | 0.1 | 2.55 | 4.5 | 0.2 | 3.28 | 8.0 | 0.3 | 3.82 | 10.3 | |
| | 0.15 | 3.43 | 4.3 | 0.3 | 4.58 | 6.7 | 0.4 | 4.93 | 8.9 | |
| | 0.2 | 4.2 | 3.9 | 0.4 | 5.72 | 5.0 | 0.5 | 5.93 | 8.0 | |
| | | | | 0.5 | 6.63 | 4.0 | 0.6 | 6.73 | 6.9 | |
| HPZ3.5-90B30-(L) | 0.05 | 1.0 | 8.7 | 0.1 | 1.15 | 13.4 | 0.2 | 1.88 | 16.5 | 90 |
| | 0.1 | 2.7 | 5.8 | 0.2 | 3.48 | 9.7 | 0.3 | 4.03 | 12.5 | |
| | 0.15 | 4.25 | 4.2 | 0.3 | 5.83 | 6.6 | 0.4 | 6.15 | 9.4 | |
| | 0.2 | 5.57 | 3.3 | 0.35 | 6.8 | 4.3 | 0.5 | 7.82 | 7.0 | |
| | | | | 0.4 | 7.67 | 3.3 | 0.6 | 9.42 | 4.8 | |
| HPZ5.9-110B30-(L) | 0.05 | 1.68 | 14.3 | 0.1 | 1.88 | 22.2 | 0.2 | 3.32 | 27.4 | 110 |
| | 0.1 | 4.32 | 10.5 | 0.2 | 5.9 | 15.8 | 0.3 | 6.92 | 21.1 | |
| | 0.15 | 7.25 | 6.9 | 0.3 | 10.3 | 9.3 | 0.4 | 10.7 | 15.1 | |
| | 0.2 | 9.55 | 4.5 | 0.4 | 13.9 | 6.1 | 0.5 | 14.2 | 10.2 | |
| | | | | | | | 0.6 | 17.1 | 7.4 | |

注：尺寸L1、L 可根据用户要求给定。

Note: size L1, L can be changed according to requirement of users.

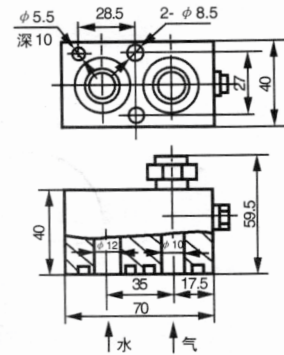
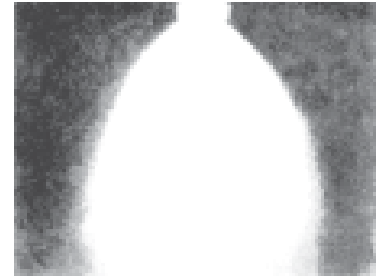
| 产品型号 Model | 气压 (Mpa) Atmospheric pressure | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|-------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|---------------------------------------|
| | 0.1 | | | 0.2 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | |
| HPZ5.6-110B30-(L) | 0.05 | 2.28 | 10.8 | 0.1 | 2.53 | 17.6 | 0.2 | 3.88 | 22.8 | 110 |
| | 0.1 | 4.48 | 8.4 | 0.2 | 5.63 | 13.9 | 0.3 | 6.52 | 19.1 | |
| | 0.15 | 6.42 | 6.6 | 0.3 | 8.48 | 10.5 | 0.4 | 8.97 | 15.5 | |
| | 0.2 | 8.1 | 5.2 | 0.4 | 11.1 | 7.6 | 0.5 | 11.3 | 12.3 | |
| | 0.3 | 10.8 | 2.9 | 0.5 | 13.2 | 5.4 | 0.6 | 13.3 | 10.0 | |
| | | | | | | | 0.7 | 15.2 | 7.7 | |
| HPZ6.6-110B30-(L) | 0.05 | 1.53 | 15.6 | 0.1 | 1.15 | 26.8 | 0.2 | 2.43 | 33.3 | 110 |
| | 0.1 | 5.4 | 8.7 | 0.2 | 6.6 | 14.5 | 0.3 | 7.43 | 20.4 | |
| | 0.15 | 9.52 | 3.9 | 0.3 | 12.9 | 6.2 | 0.4 | 13.3 | 10.6 | |
| | | | | 0.35 | 15.9 | 3.2 | 0.5 | 18.0 | 5.3 | |
| | | | | | | | 0.55 | 20.2 | 3.1 | |
| HPZ3.3-110B30-(L) | 0.05 | 1.28 | 8.6 | 0.1 | 1.47 | 14.4 | 0.2 | 2.32 | 17.8 | 110 |
| | 0.1 | 2.55 | 7.1 | 0.2 | 3.25 | 11.9 | 0.3 | 3.75 | 16.4 | |
| | 0.2 | 4.28 | 5.2 | 0.3 | 4.62 | 10.3 | 0.4 | 4.95 | 14.4 | |
| | 0.3 | 5.6 | 4.4 | 0.4 | 5.8 | 8.4 | 0.5 | 6.0 | 12.7 | |
| | | | | 0.5 | 6.8 | 6.8 | 0.6 | 6.8 | 11.4 | |
| HPZ3.9-110B30-(L) | 0.05 | 1.4 | 8.2 | 0.1 | 1.38 | 13.8 | 0.2 | 2.35 | 17.8 | 110 |
| | 0.1 | 3.12 | 6.5 | 0.2 | 3.9 | 10.1 | 0.3 | 4.45 | 14.2 | |
| | 0.2 | 5.7 | 3.5 | 0.3 | 6.03 | 7.0 | 0.4 | 6.28 | 11.4 | |
| | 0.3 | 7.72 | 2.2 | 0.4 | 7.63 | 5.7 | 0.5 | 7.85 | 8.3 | |
| | | | | | | | 0.6 | 9.27 | 7.5 | |
| HPZ3.6-110B31-(L) | 0.05 | 1.75 | 6.2 | 0.1 | 2.03 | 10.1 | 0.2 | 2.98 | 13.0 | 110 |
| | 0.1 | 2.75 | 6.0 | 0.2 | 3.62 | 9.2 | 0.3 | 4.25 | 12.4 | |
| | 0.2 | 4.35 | 5.1 | 0.3 | 4.88 | 8.3 | 0.4 | 5.33 | 11.5 | |
| | 0.3 | 5.63 | 4.2 | 0.4 | 5.92 | 7.5 | 0.5 | 6.25 | 10.6 | |
| | | | | 0.5 | 6.87 | 6.7 | 0.6 | 7.02 | 9.7 | |
| | | | | | | | 0.7 | 7.85 | 9.0 | |
| HPZ2.6-110B30-(L) | 0.1 | 1.98 | 6.07 | 0.1 | 1.03 | 11.68 | 0.2 | 1.78 | 14.94 | 110 |
| | 0.2 | 3.87 | 3.99 | 0.2 | 2.63 | 9.46 | 0.3 | 3.23 | 13.20 | |
| | 0.3 | 5.20 | 2.71 | 0.3 | 4.20 | 7.60 | 0.4 | 4.50 | 10.74 | |
| | | | | 0.4 | 5.43 | 6.45 | 0.5 | 5.60 | 8.9 | |
| | | | | 0.5 | 6.47 | 5.53 | 0.6 | 6.60 | 7.99 | |
| | | | | | | | | | | |
| HPZ3.4-110B30-(L) | 0.1 | 3.02 | 4.84 | 0.1 | 1.45 | 11.04 | 0.2 | 2.37 | 14.06 | 110 |
| | 0.2 | 5.60 | 2.93 | 0.2 | 3.85 | 8.44 | 0.3 | 4.53 | 11.20 | |
| | 0.3 | 7.78 | 0.71 | 0.3 | 6.03 | 5.73 | 0.4 | 6.50 | 9.00 | |
| | | | | 0.4 | 7.90 | 4.01 | 0.5 | 8.28 | 6.59 | |
| | | | | 0.5 | 9.48 | 2.56 | 0.6 | 9.93 | 4.97 | |
| | | | | | | | 0.7 | 11.22 | 3.49 | |

喷雾特性及用途:

该喷嘴主体采用轧制铜材，因而具有良好的密封、耐磨性，在使用中喷头磨损，可以更换。它的喷淋形状为双峰锥形，覆盖面大，雾化均匀、性能稳定；该喷嘴主要适用于特钢圆坯、方坯连铸的二次冷却。

Spray Feature and Application:

The body of the nozzle is made of rolled copper so it has good sealing and antiwear property. The nozzle head can be replaced when it is worn during operation. Its spray pattern is of double-peak cone with large covering area, even atomization and stable performance. The nozzle is mainly suitable for the secondary cooling of continuous casting machine for special steel round bloom and square bloom.



| 产品型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|---------------|------------------------------------|--------------------------------|---|----------------------------------|--------------------------------|---|----------------------------------|--------------------------------|---|----------------------------------|--------------------------------|---|--|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm ³ /h) | |
| HPZ0.72-70QZ2 | 0.15 | 0.63 | 3.8 | 0.15 | 0.57 | 5.1 | 0.15 | 0.47 | 6.8 | | | | 70 |
| | 0.2 | 0.8 | 3.7 | 0.2 | 0.72 | 5.0 | 0.2 | 0.65 | 6.6 | | | | |
| | 0.3 | 1.1 | 3.6 | 0.3 | 1.02 | 4.9 | 0.3 | 0.95 | 6.5 | | | | |
| | 0.4 | 1.3 | 3.5 | 0.4 | 1.25 | 4.8 | 0.4 | 1.18 | 6.4 | | | | |
| HPZ0.82-60QZ2 | 0.15 | 0.72 | 4.3 | 0.15 | 0.65 | 5.8 | 0.15 | 0.55 | 6.5 | | | | 60 |
| | 0.2 | 0.92 | 4.1 | 0.2 | 0.82 | 5.7 | 0.2 | 0.73 | 6.3 | | | | |
| | 0.3 | 1.23 | 4.0 | 0.3 | 1.13 | 5.5 | 0.3 | 1.08 | 5.9 | | | | |
| | 0.4 | 1.47 | 3.9 | 0.4 | 1.37 | 4.8 | 0.4 | 1.3 | 5.5 | | | | |
| HPZ0.88-70QZ2 | 0.15 | 0.72 | 3.8 | 0.15 | 0.63 | 5.0 | 0.15 | 0.53 | 6.1 | | | | 70 |
| | 0.2 | 1.0 | 3.6 | 0.2 | 0.88 | 4.8 | 0.2 | 0.77 | 6.0 | | | | |
| | 0.3 | 1.38 | 3.4 | 0.3 | 1.3 | 4.6 | 0.3 | 1.22 | 5.9 | | | | |
| | 0.4 | 1.67 | 3.3 | 0.4 | 1.6 | 4.3 | 0.4 | 1.53 | 5.5 | | | | |
| HPZ1.0-70QZ2 | 0.1 | 0.55 | 6.8 | 0.15 | 0.75 | 7.4 | 0.2 | 0.95 | 8.1 | 0.25 | 1.05 | 8.7 | 70 |
| | 0.15 | 0.9 | 6.5 | 0.2 | 1.00 | 7.2 | 0.25 | 1.17 | 7.9 | 0.3 | 1.25 | 8.5 | |
| | 0.2 | 1.17 | 6.2 | 0.25 | 1.27 | 7.0 | 0.3 | 1.37 | 7.8 | 0.35 | 1.47 | 8.3 | |
| | 0.25 | 1.38 | 6.0 | 0.3 | 1.48 | 6.8 | 0.35 | 1.55 | 7.6 | 0.4 | 1.62 | 8.2 | |
| HPZ1.13-60QZ2 | 0.15 | 1.0 | 3.8 | 0.15 | 0.87 | 5.0 | 0.15 | 0.73 | 6.3 | | | | 60 |
| | 0.2 | 1.28 | 3.6 | 0.2 | 1.13 | 4.7 | 0.2 | 0.98 | 6.1 | | | | |
| | 0.3 | 1.65 | 3.4 | 0.3 | 1.52 | 4.5 | 0.3 | 1.37 | 6.0 | | | | |
| | 0.4 | 1.92 | 3.2 | 0.4 | 1.83 | 4.2 | 0.4 | 1.75 | 5.0 | | | | |
| HPZ1.17-60QZ2 | 0.15 | 1.05 | 3.8 | 0.15 | 0.87 | 4.7 | 0.15 | 0.72 | 5.3 | | | | 60 |
| | 0.2 | 1.33 | 3.5 | 0.2 | 1.17 | 4.6 | 0.2 | 1.05 | 5.2 | | | | |
| | 0.3 | 1.7 | 3.0 | 0.3 | 1.62 | 4.1 | 0.3 | 1.52 | 5.1 | | | | |
| | 0.4 | 2.02 | 2.7 | 0.4 | 1.92 | 3.8 | 0.4 | 1.82 | 5.0 | | | | |

| 产品型号 Model | 气压 (MPa) Atmospheric pressure (MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|---------------|-------------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|--|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | |
| HPZ1.2-60QZ2 | 0.1 | 0.75 | 6.9 | 0.15 | 0.9 | 7.5 | 0.2 | 1.0 | 8.1 | 0.25 | 1.1 | 8.8 | 60 |
| | 0.15 | 1.08 | 6.6 | 0.2 | 1.2 | 7.3 | 0.25 | 1.25 | 7.9 | 0.3 | 1.3 | 8.6 | |
| | 0.2 | 1.35 | 6.2 | 0.25 | 1.4 | 7.0 | 0.3 | 1.5 | 7.7 | 0.35 | 1.5 | 8.4 | |
| | 0.25 | 1.57 | 5.9 | 0.3 | 1.6 | 6.8 | 0.35 | 1.6 | 7.4 | 0.4 | 1.7 | 8.1 | |
| HPZ1.25-60QZ2 | 0.1 | 0.75 | 6.8 | 0.15 | 0.95 | 7.4 | 0.2 | 1.03 | 8.0 | 0.25 | 1.15 | 8.7 | 60 |
| | 0.15 | 1.08 | 6.5 | 0.2 | 1.25 | 7.2 | 0.25 | 1.3 | 7.8 | 0.3 | 1.38 | 8.5 | |
| | 0.2 | 1.35 | 6.0 | 0.25 | 1.43 | 6.9 | 0.3 | 1.53 | 7.6 | 0.35 | 1.58 | 8.3 | |
| | 0.25 | 1.57 | 5.8 | 0.3 | 1.63 | 6.7 | 0.35 | 1.68 | 7.3 | 0.4 | 1.75 | 8.0 | |
| HPZ1.35-60QZ2 | 0.1 | 0.9 | 4.6 | 0.1 | 0.68 | 6.9 | 0.2 | 1.27 | 8.2 | 0.25 | 1.43 | 10.6 | 60 |
| | 0.15 | 1.33 | 4.4 | 0.2 | 1.35 | 6.1 | 0.3 | 1.85 | 7.9 | 0.3 | 1.73 | 10.0 | |
| | 0.2 | 1.67 | 4.0 | 0.3 | 2.0 | 5.5 | 0.4 | 2.4 | 7.1 | 0.4 | 2.27 | 9.2 | |
| | 0.3 | 2.25 | 3.5 | 0.4 | 2.58 | 4.9 | 0.5 | 2.83 | 6.5 | 0.5 | 2.72 | 8.6 | |
| HPZ1.5-90QZ2 | 0.1 | 1.1 | 11.6 | 0.15 | 1.3 | 14.2 | 0.2 | 1.4 | 16.2 | 0.25 | 1.5 | 18.8 | 90 |
| | 0.15 | 1.5 | 10.4 | 0.2 | 1.5 | 13.1 | 0.3 | 2.1 | 14.8 | 0.3 | 1.9 | 18.0 | |
| | 0.2 | 2.0 | 9.5 | 0.3 | 2.4 | 11.6 | 0.4 | 2.7 | 13.5 | 0.4 | 2.5 | 16.7 | |
| | 0.3 | 2.6 | 8.3 | 0.4 | 2.9 | 10.3 | 0.5 | 3.1 | 12.4 | 0.5 | 3.0 | 15.5 | |
| HPZ1.5-70QZ2 | 0.1 | 1.1 | 11.6 | 0.15 | 1.25 | 14.2 | 0.2 | 1.37 | 16.2 | 0.25 | 1.5 | 18.8 | 70 |
| | 0.15 | 1.5 | 10.4 | 0.2 | 1.5 | 13.1 | 0.3 | 2.08 | 14.8 | 0.3 | 1.87 | 18.0 | |
| | 0.2 | 1.95 | 9.5 | 0.3 | 2.35 | 11.6 | 0.4 | 2.65 | 13.5 | 0.4 | 2.47 | 16.7 | |
| | 0.3 | 2.63 | 8.3 | 0.4 | 2.92 | 10.3 | 0.5 | 3.12 | 12.4 | 0.5 | 2.95 | 15.5 | |
| | 0.4 | 3.18 | 7.5 | 0.5 | 3.37 | 8.8 | 0.6 | 3.5 | 11.6 | 0.6 | 3.35 | 14.2 | |
| HPZ1.6-70QZ2 | 0.1 | 1.03 | 10.2 | 0.15 | 1.22 | 12.6 | 0.2 | 1.38 | 14.7 | 0.25 | 1.58 | 17.0 | 70 |
| | 0.15 | 1.43 | 9.4 | 0.2 | 1.62 | 11.7 | 0.25 | 1.72 | 14.2 | 0.3 | 1.87 | 16.2 | |
| | 0.2 | 1.82 | 8.8 | 0.25 | 1.95 | 11.0 | 0.3 | 2.02 | 13.5 | 0.35 | 2.15 | 15.6 | |
| | 0.25 | 2.13 | 8.2 | 0.3 | 2.3 | 10.5 | 0.35 | 2.33 | 12.7 | 0.4 | 2.42 | 15.0 | |
| HPZ1.8-70QZ2 | 0.1 | 1.07 | 6.6 | 0.15 | 1.18 | 8.8 | 0.2 | 1.35 | 10.3 | 0.25 | 1.58 | 12.8 | 70 |
| | 0.15 | 1.67 | 5.5 | 0.2 | 1.8 | 7.3 | 0.3 | 2.42 | 8.4 | 0.3 | 2.07 | 11.4 | |
| | 0.2 | 2.28 | 4.6 | 0.3 | 2.8 | 5.7 | 0.4 | 3.37 | 7.1 | 0.4 | 3.0 | 9.8 | |
| | 0.3 | 3.15 | 3.6 | 0.4 | 3.7 | 4.2 | 0.5 | 4.05 | 6.0 | 0.5 | 3.77 | 8.4 | |
| HPZ1.9-60QZ2 | 0.15 | 1.8 | 9.8 | 0.2 | 1.9 | 12.1 | 0.25 | 2.2 | 14.4 | 0.3 | 2.3 | 16.8 | 60 |
| | 0.2 | 2.5 | 8.2 | 0.25 | 2.6 | 10.4 | 0.3 | 2.8 | 12.5 | 0.35 | 2.9 | 15.2 | |
| | 0.3 | 3.8 | 5.5 | 0.3 | 3.4 | 8.7 | 0.4 | 4.0 | 10.1 | 0.40 | 3.5 | 13.6 | |
| | 0.4 | 4.8 | 4.3 | 0.4 | 4.4 | 6.8 | 0.5 | 5.0 | 8.2 | 0.5 | 4.6 | 11.4 | |
| HPZ2.0-80QZ2 | 0.2 | 2.3 | 8.2 | 0.2 | 2.0 | 12.1 | 0.3 | 2.7 | 12.7 | 0.3 | 2.3 | 16.4 | 80 |
| | 0.3 | 3.6 | 6.3 | 0.3 | 2.9 | 9.5 | 0.4 | 3.7 | 10.4 | 0.4 | 3.5 | 13.8 | |
| | | | | 0.4 | 4.2 | 7.6 | 0.5 | 4.7 | 9.0 | 0.5 | 4.3 | 11.6 | |
| HPZ2.0-90QZ2 | 0.1 | 1.0 | 11.5 | 0.15 | 1.35 | 13.4 | 0.2 | 1.6 | 15.0 | 0.25 | 1.82 | 17.2 | 90 |
| | 0.15 | 1.73 | 10.5 | 0.2 | 2.0 | 12.3 | 0.3 | 2.78 | 13.0 | 0.3 | 2.37 | 16.6 | |
| | 0.2 | 2.45 | 8.7 | 0.3 | 3.18 | 10.2 | 0.4 | 3.78 | 11.3 | 0.4 | 3.42 | 13.9 | |
| | 0.3 | 3.57 | 6.9 | 0.4 | 4.12 | 8.3 | 0.5 | 4.6 | 8.7 | 0.5 | 4.27 | 12.6 | |
| | 0.4 | 4.47 | 4.3 | 0.5 | 4.9 | 6.8 | 0.6 | 5.33 | 6.4 | 0.6 | 5.03 | 10.1 | |

| 产品型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|---------------|------------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|--|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | |
| HPZ2.0-60QZ2 | 0.1 | 0.87 | 13.4 | 0.15 | 1.22 | 15.7 | 0.2 | 1.45 | 18.0 | 0.25 | 1.58 | 21.4 | 60 |
| | 0.15 | 1.75 | 11.0 | 0.2 | 2.0 | 13.5 | 0.25 | 2.05 | 16.1 | 0.3 | 2.2 | 18.8 | |
| | 0.2 | 2.45 | 9.3 | 0.25 | 2.62 | 12.0 | 0.3 | 2.8 | 14.3 | 0.35 | 2.9 | 17.0 | |
| | 0.25 | 3.23 | 7.5 | 0.3 | 3.32 | 10.5 | 0.35 | 3.38 | 13.1 | 0.4 | 3.55 | 15.0 | |
| HPZ2.2-75QZ2 | 0.15 | 1.9 | 8.9 | 0.2 | 2.2 | 10.9 | 0.25 | 2.3 | 13.1 | 0.3 | 2.6 | 14.8 | 75 |
| | 0.2 | 2.6 | 7.6 | 0.25 | 2.8 | 9.9 | 0.3 | 3.0 | 11.8 | 0.35 | 3.2 | 13.8 | |
| | 0.3 | 4.1 | 4.4 | 0.3 | 3.5 | 8.1 | 0.4 | 4.3 | 8.8 | 0.4 | 3.7 | 12.6 | |
| | 0.4 | 5.2 | 2.7 | 0.4 | 4.7 | 5.4 | 0.5 | 5.3 | 6.4 | 0.5 | 4.8 | 9.6 | |
| HPZ2.3-75QZ2 | 0.2 | 2.7 | 7.9 | 0.2 | 2.3 | 9.3 | 0.2 | 2.1 | 11.6 | 0.2 | 1.9 | 13.2 | 75 |
| | 0.3 | 3.6 | 7.3 | 0.3 | 3.2 | 8.5 | 0.3 | 3.0 | 11.1 | 0.3 | 3.0 | 13.0 | |
| | 0.4 | 4.5 | 5.7 | 0.4 | 4.2 | 7.5 | 0.4 | 3.8 | 10.5 | 0.4 | 3.6 | 12.1 | |
| | 0.5 | 5.3 | 5.0 | 0.5 | 5.1 | 6.9 | 0.5 | 4.6 | 9.2 | 0.5 | 4.3 | 11.2 | |
| HPZ2.3-90QZ2 | 0.15 | 2.18 | 9.0 | 0.2 | 2.3 | 11.7 | 0.25 | 2.72 | 14.5 | 0.3 | 2.95 | 17.2 | 90 |
| | 0.2 | 2.8 | 8.2 | 0.25 | 3.02 | 11.0 | 0.3 | 3.22 | 13.5 | 0.35 | 3.4 | 16.4 | |
| | 0.3 | 3.88 | 7.1 | 0.3 | 3.53 | 10.3 | 0.4 | 4.15 | 12.4 | 0.4 | 3.85 | 15.6 | |
| | 0.4 | 4.77 | 6.0 | 0.4 | 4.45 | 9.2 | 0.5 | 4.97 | 11.0 | 0.5 | 4.7 | 14.1 | |
| HPZ2.4-90QZ2 | 0.1 | 1.15 | 11.0 | 0.15 | 1.52 | 13.5 | 0.2 | 1.8 | 15.8 | 0.25 | 2.08 | 16.6 | 90 |
| | 0.15 | 2.05 | 9.7 | 0.2 | 2.4 | 11.6 | 0.3 | 3.23 | 13.1 | 0.3 | 2.78 | 15.3 | |
| | 0.2 | 2.85 | 8.3 | 0.3 | 3.72 | 9.9 | 0.4 | 4.38 | 11.1 | 0.4 | 3.97 | 12.9 | |
| | 0.3 | 4.17 | 6.5 | 0.4 | 4.78 | 8.1 | 0.5 | 5.35 | 9.7 | 0.5 | 4.95 | 11.8 | |
| | 0.4 | 5.23 | 5.4 | 0.5 | 5.73 | 6.3 | 0.6 | 6.2 | 8.4 | 0.6 | 5.83 | 10.4 | |
| HPZ2.5-60QZ2 | 0.15 | 2.3 | 7.5 | 0.2 | 2.5 | 9.8 | 0.25 | 2.7 | 12.0 | 0.3 | 3.0 | 14.4 | 60 |
| | 0.2 | 3.0 | 6.2 | 0.25 | 3.2 | 8.5 | 0.3 | 3.3 | 10.7 | 0.35 | 3.5 | 13.1 | |
| | 0.3 | 4.4 | 4.6 | 0.3 | 3.8 | 7.7 | 0.4 | 4.5 | 8.8 | 0.4 | 4.1 | 11.9 | |
| | 0.4 | 5.4 | 3.3 | 0.4 | 5.0 | 5.8 | 0.5 | 5.6 | 7.1 | 0.5 | 5.2 | 10.2 | |
| HPZ2.5-55QZ2 | 0.15 | 2.3 | 10.0 | 0.15 | 1.8 | 14.7 | 0.2 | 2.0 | 17.2 | 0.2 | 1.5 | 21.4 | 55 |
| | 0.2 | 3.1 | 8.7 | 0.2 | 2.5 | 12.3 | 0.25 | 2.7 | 14.9 | 0.3 | 3.0 | 17.8 | |
| | 0.25 | 3.9 | 6.7 | 0.3 | 4.0 | 9.7 | 0.3 | 3.4 | 13.7 | 0.4 | 4.2 | 14.5 | |
| | 0.3 | 4.7 | 5.5 | 0.4 | 5.3 | 6.4 | 0.4 | 4.8 | 9.8 | 0.5 | 5.4 | 10.7 | |
| HPZ2.8-75QZ2 | 0.12 | 1.3 | 15.9 | 0.16 | 1.23 | 20.5 | 0.2 | 1.28 | 24.5 | 0.25 | 1.67 | 26.3 | 75 |
| | 0.15 | 2.55 | 10.4 | 0.2 | 2.8 | 12.6 | 0.25 | 3.2 | 15.2 | 0.3 | 3.45 | 17.3 | |
| | 0.2 | 5.07 | 4.3 | 0.25 | 5.28 | 6.1 | 0.3 | 5.53 | 7.2 | 0.35 | 5.5 | 10.6 | |
| | 0.25 | 7.02 | 1.6 | 0.3 | 7.22 | 2.6 | 0.35 | 7.17 | 4.5 | 0.4 | 7.47 | 5.6 | |
| HPZ4.4-75QZ2 | 0.2 | 5.6 | 6.0 | 0.2 | 4.4 | 8.6 | 0.2 | 3.6 | 11.1 | 0.2 | 3.1 | 13.2 | 75 |
| | 0.3 | 8.3 | 4.8 | 0.3 | 7.3 | 6.0 | 0.3 | 6.3 | 8.5 | 0.3 | 5.5 | 10.9 | |
| | 0.4 | 10.7 | 4.5 | 0.4 | 9.6 | 5.1 | 0.4 | 8.5 | 6.7 | 0.4 | 7.5 | 8.8 | |
| | 0.5 | 12.6 | 4.3 | 0.5 | 11.8 | 4.9 | 0.5 | 10.8 | 5.3 | 0.5 | 9.9 | 6.7 | |

| 产品型号 Model | 气压 (MPa) Atmospheric pressure(MPa) | | | | | | | | | | | | 喷射角 (°) Spray angle (degree) |
|---------------|------------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|----------------------------------|--------------------------------|------------------------------|--|
| | 0.15 | | | 0.2 | | | 0.25 | | | 0.3 | | | |
| | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | 水压 Water pressure (MPa) | 水量 Water flow (L/min) | 气量 Air flow (Nm³/h) | |
| HPZ4.4-55QZ2 | 0.13 | 1.7 | 21.3 | 0.17 | 1.4 | 28.2 | 0.22 | 1.7 | 33.2 | 0.26 | 1.7 | 38.5 | 55 |
| | 0.15 | 4.0 | 13.3 | 0.2 | 4.4 | 16.4 | 0.25 | 4.7 | 19.6 | 0.3 | 5.5 | 21.2 | |
| | 0.18 | 7.4 | 4.2 | 0.22 | 6.6 | 9.4 | 0.3 | 9.4 | 7.1 | 0.35 | 9.6 | 8.6 | |
| | | | | 0.25 | 9.4 | 2.0 | 0.33 | 11.6 | 3.8 | 0.38 | 11.7 | 5.4 | |
| HPZ4.5-80QZ2 | 0.13 | 2.1 | 14.2 | 0.17 | 1.6 | 21.3 | 0.22 | 2.2 | 24.2 | 0.25 | 1.4 | 30.4 | 80 |
| | 0.15 | 4.1 | 8.9 | 0.2 | 4.5 | 11.1 | 0.25 | 4.7 | 14.4 | 0.3 | 5.1 | 17.3 | |
| | 0.18 | 6.9 | 3.9 | 0.25 | 8.7 | 4.3 | 0.3 | 8.7 | 6.7 | 0.35 | 8.8 | 9.6 | |
| | 0.2 | 8.0 | 2.4 | 0.27 | 9.7 | 2.1 | 0.33 | 10.4 | 3.1 | 0.4 | 11.6 | 4.2 | |
| HPZ4.9-65QZ2 | 0.12 | 1.8 | 24.3 | 0.18 | 2.4 | 28.1 | 0.22 | 2.0 | 36.2 | 0.27 | 2.4 | 39.9 | 65 |
| | 0.15 | 4.6 | 13.9 | 0.2 | 4.9 | 18.8 | 0.25 | 5.3 | 22.2 | 0.3 | 6.0 | 25.0 | |
| | 0.18 | 8.3 | 5.7 | 0.22 | 7.2 | 12.0 | 0.3 | 10.5 | 8.5 | 0.35 | 10.7 | 12.3 | |
| | 0.2 | 9.9 | 2.3 | 0.25 | 10.3 | 4.9 | 0.33 | 12.9 | 5.0 | 0.4 | 14.4 | 5.7 | |
| HPZ5.0-95QZ2 | 0.2 | 7.2 | 6.4 | 0.2 | 5.0 | 10.5 | 0.2 | 3.2 | 15.3 | 0.2 | 2.1 | 18.6 | 95 |
| | 0.3 | 11.9 | 4.6 | 0.3 | 10.1 | 5.7 | 0.3 | 7.5 | 8.8 | 0.3 | 6.0 | 12.9 | |
| | | | | | | | 0.4 | 12.3 | 4.9 | 0.4 | 10.5 | 7.9 | |
| | | | | | | | | | | 0.5 | 14.2 | 5.4 | |
| HPZ5.6-80QZ2 | 0.13 | 2.3 | 16.6 | 0.18 | 3.1 | 19.6 | 0.22 | 2.1 | 28.0 | 0.28 | 4.2 | 26.8 | 80 |
| | 0.15 | 5.2 | 8.8 | 0.2 | 5.6 | 11.8 | 0.25 | 5.9 | 15.1 | 0.3 | 6.4 | 18.0 | |
| | 0.18 | 8.8 | 3.5 | 0.23 | 8.9 | 6.0 | 0.28 | 9.2 | 8.4 | 0.33 | 9.5 | 11.2 | |
| | 0.2 | 11.0 | 2.2 | 0.25 | 10.6 | 3.9 | 0.3 | 10.9 | 5.9 | 0.35 | 11.1 | 8.4 | |
| HPZ7.4-80QZ2 | 0.13 | 3.8 | 19.9 | 0.15 | 1.4 | 36.3 | 0.2 | 2.2 | 40.9 | 0.25 | 2.9 | 46.2 | 80 |
| | 0.15 | 6.7 | 12.1 | 0.2 | 7.4 | 16.3 | 0.25 | 8.0 | 21.0 | 0.3 | 8.0 | 26.0 | |
| | 0.18 | 11.1 | 6.6 | 0.23 | 11.3 | 9.7 | 0.3 | 13.7 | 10.4 | 0.35 | 14.0 | 14.2 | |
| | 0.2 | 13.3 | 4.6 | 0.25 | 13.4 | 7.0 | 0.35 | 18.1 | 5.2 | 0.4 | 18.2 | 7.7 | |
| HPZ8.8-80QZ2 | 0.13 | 4.5 | 22.8 | 0.15 | 2.2 | 39.5 | 0.2 | 3.0 | 45.1 | 0.25 | 4.0 | 49.6 | 80 |
| | 0.15 | 8.1 | 14.5 | 0.2 | 8.8 | 19.5 | 0.25 | 9.6 | 24.1 | 0.3 | 10.0 | 29.9 | |
| | 0.18 | 13.0 | 7.7 | 0.25 | 15.8 | 8.5 | 0.3 | 16.0 | 12.8 | 0.35 | 16.4 | 16.9 | |
| | 0.2 | 15.4 | 5.4 | 0.28 | 18.9 | 6.1 | 0.35 | 21.2 | 7.2 | 0.4 | 21.3 | 10.6 | |
| HPZ9.0-65QZ2 | 0.12 | 3.5 | 35.6 | 0.17 | 4.7 | 38.7 | 0.22 | 6.1 | 42.2 | 0.28 | 8.1 | 43.8 | 65 |
| | 0.15 | 8.1 | 21.2 | 0.2 | 9.0 | 26.3 | 0.25 | 10.0 | 30.4 | 0.3 | 11.0 | 35.1 | |
| | 0.18 | 13.5 | 10.4 | 0.25 | 16.6 | 12.4 | 0.3 | 17.0 | 16.8 | 0.4 | 23.3 | 12.2 | |
| | 0.2 | 16.6 | 7.4 | 0.3 | 22.9 | 5.4 | 0.35 | 23.1 | 9.0 | 0.44 | 27.3 | 8.1 | |
| HPZ9.4-95QZ2 | 0.2 | 13.1 | 10.2 | 0.2 | 9.4 | 17.8 | 0.2 | 6.7 | 26.6 | 0.2 | 4.8 | 36.2 | 95 |
| | 0.3 | 20.9 | 5.3 | 0.3 | 17.7 | 9.2 | 0.3 | 14.0 | 15.8 | 0.3 | 11.0 | 23.5 | |
| | | | | 0.4 | 24.0 | 5.6 | 0.4 | 21.3 | 8.1 | 0.4 | 18.3 | 14.1 | |
| | | | | | | | 0.5 | 26.8 | 6.0 | 0.5 | 24.5 | 9.1 | |