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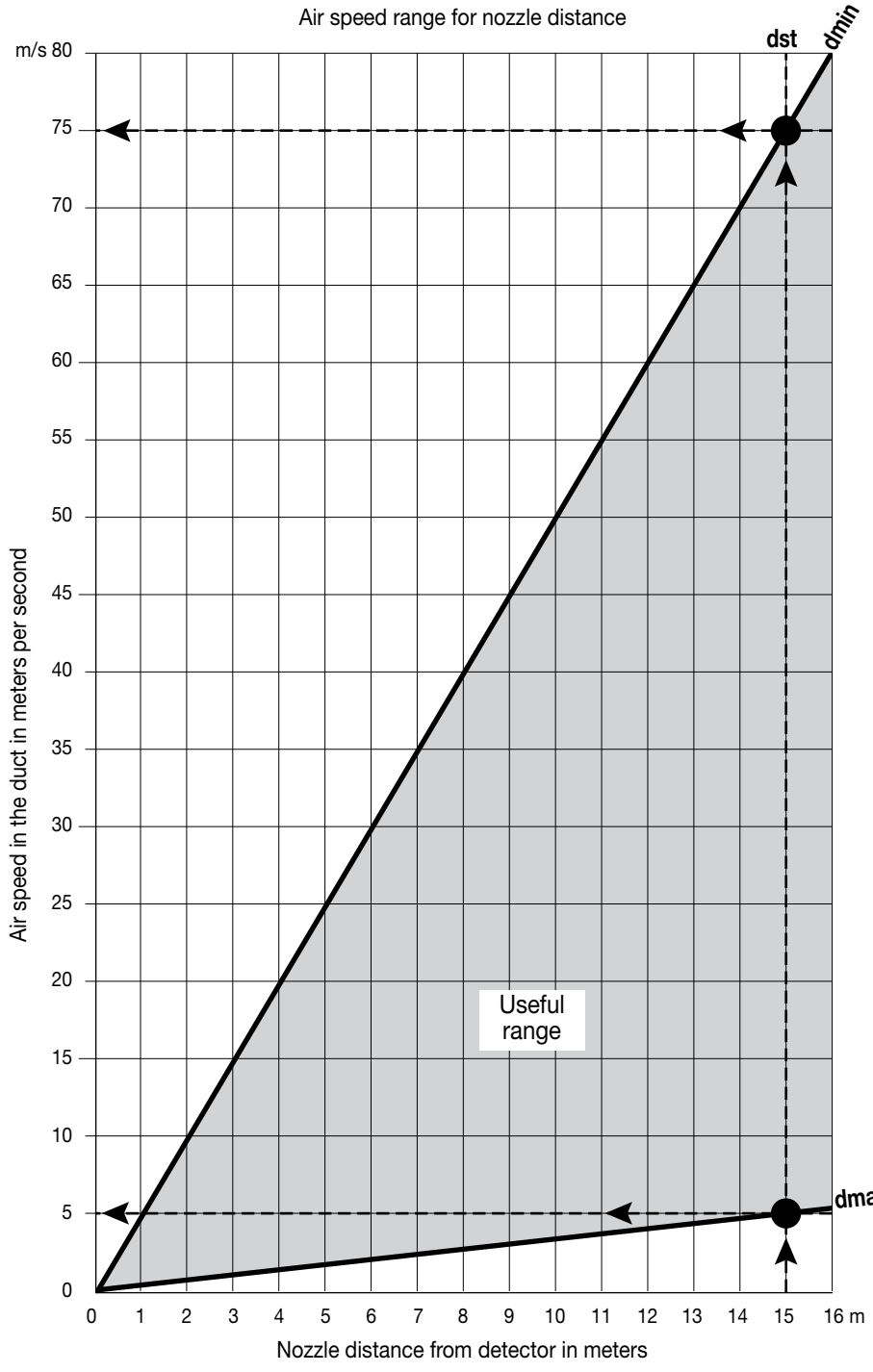
DISTANCE BETWEEN SPARK DETECTOR AND SPRAY NOZZLE

The minimum distance is based on 0.2 sec delay time due to the response delay time of the solenoid valve and water travelling time from solenoid valve to nozzle (with a 3-4 bar water pressure).
The maximum distance is based on 3 sec time the spark detector is held active for each spark detected (the nozzle sprays water for 3 sec).
Air speed range is normally 20-30 m/s for woodwork and 15-20 m/s for textile or other industries.

When the available duct length is critical, a higher water pressure of 5-6 bar is suggested.
See graph and table below with details about air speed range covered by duct length available for extinguishing.

Standard distance 15 meters

If duct length is enough, standard distance of 15 meters based on 0.2 sec delay time covers an air speed range from 5 meters per second to 75 meters for second, that is highly sufficient for most applications.



Available duct length	Air speed range m/s (meters per second)	
m	from	to
1	1	5
2	1	10
3	1	15
4	2	20
5	2	25
6	2	30
7	3	35
8	3	40
9	3	45
10	4	50
11	4	55
12	4	60
13	5	65
14	5	70
15	5	75
16	6	80
17	6	85
18	6	90
19	7	95
20	7	100

dmin = minimum distance line (the points are obtained by multiplying speed by 0,2)
dmax = maximum distance line (the points are obtained by multiplying speed by 3)
dst = standard distance (15 meters)

Note:
if air speed is less than 5 m/s, standard distance is higher than maximum distance;
if air speed is more than 75 m/s, standard distance is less than minimum distance.