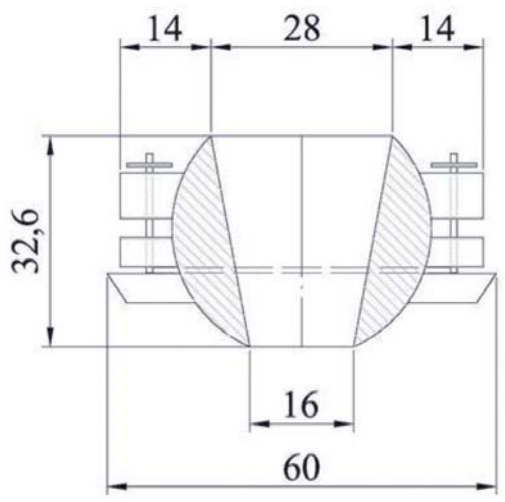
DMU

Diffuser with individually adjustable micro nozzles with high output velocity and low sound in order to obtain extensive penetration depths of the room to be air conditioned.

TECHNICAL SPECIFICATION AND USAGE LIMIT

APPLICATIONS	MATERIAL	COLOR	FASTENING	INSTALLATION	ADJUSTMENT
Guarantees airflow in the whole room and not only in the area of the diffuser. The total throw generated by many micro throws guarantees very high induction between the primary and the ambient air. This allows rapidly reducing the velocity and temperature before the air arrives at the occupied area. The micro-nozzle diffusers are available in both version for rectangular ducts or couplable to the plenum and in the version for circular ducts.	Steel frame, pvc micro nozzles	White RAL 9010 with black pvc nozzles (On request also whites). On request panel painting in non-standard RAL	by means of visible screws	Easy installation, adjustments and maintenance. The diffusers are fastened to the plenum by means of side screws or a central screw.	The airflow distribution is manually adjusted by acting on the nozzles that can move 360 degrees in all directions.



GREEN BUILDING

Thanks also to the support of GreenMap, products manufactured by Tecnica srl contribute to obtain the credits of the major international rating systems for suistainable buildings:

LEED

Contributes to credits:
IP, EA, MR

WELL

Contributes to credits:
MATERIALS, COMMUNITY

BREEAM

Contributes to credits:
MAN, WST

For further details about specific contributions to the credits indicated, contact Tecnica Srl

TECHNICAL DATA

Number of nozzles [n]	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
DMU base “B” [mm]	150	220	290	360	430	500	570	640	710	780	850	920	990	1060	1130	1200	1270	1340	1410
Number of nozzles [m]	1	2	3	4	5	6	7	8	9	10									
DMU HEIGHT “H” [mm]	80	150	220	290	360	430	500	570	640	710									

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APPLICATIONS								
Residential	Easy Pack	Calculation Method	REACH Certificate	RoHS Certificate	Industry	Building	Air Conditioning	Interior design

Selection charts

Flow Rate / Air Speed / Throw (Vt.: 0,50m/s)

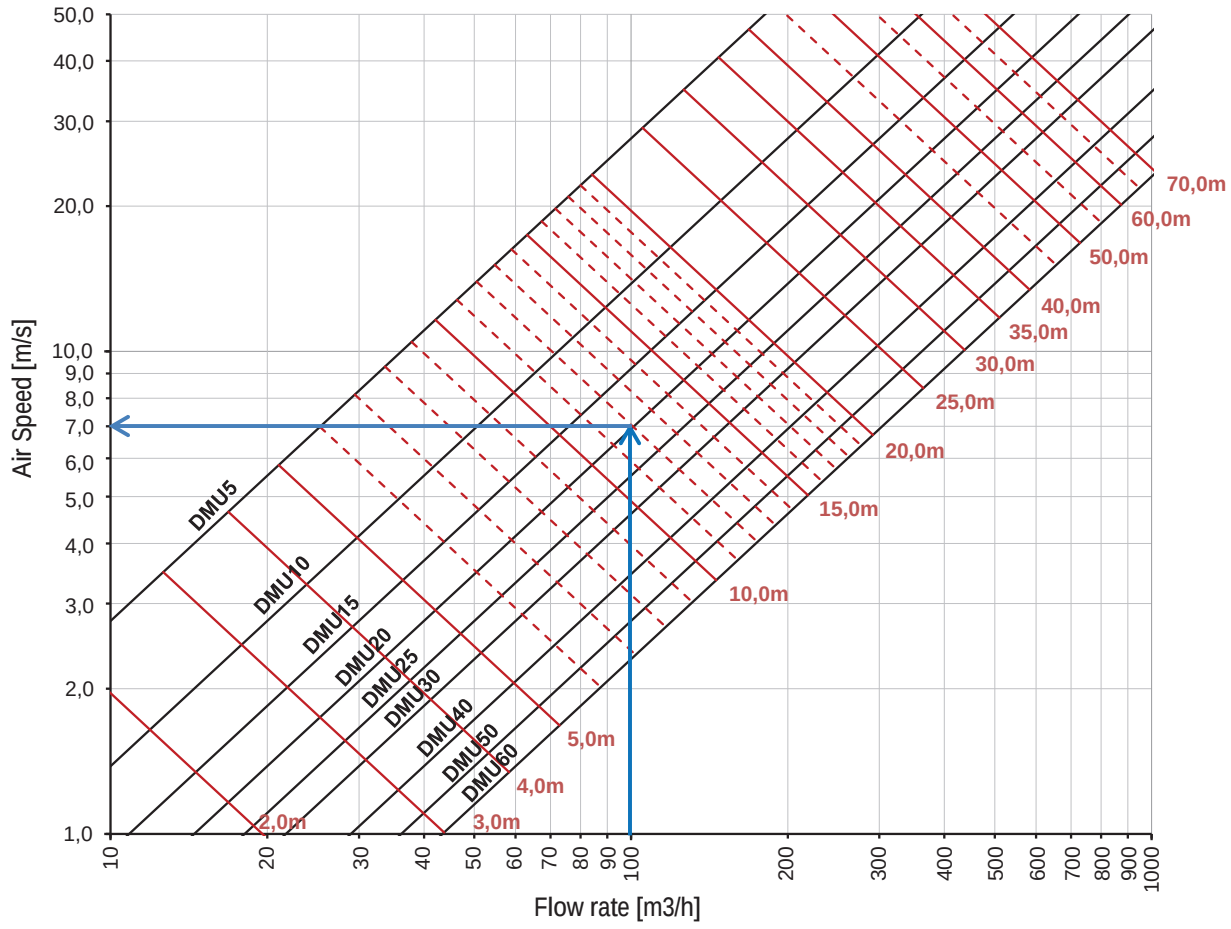
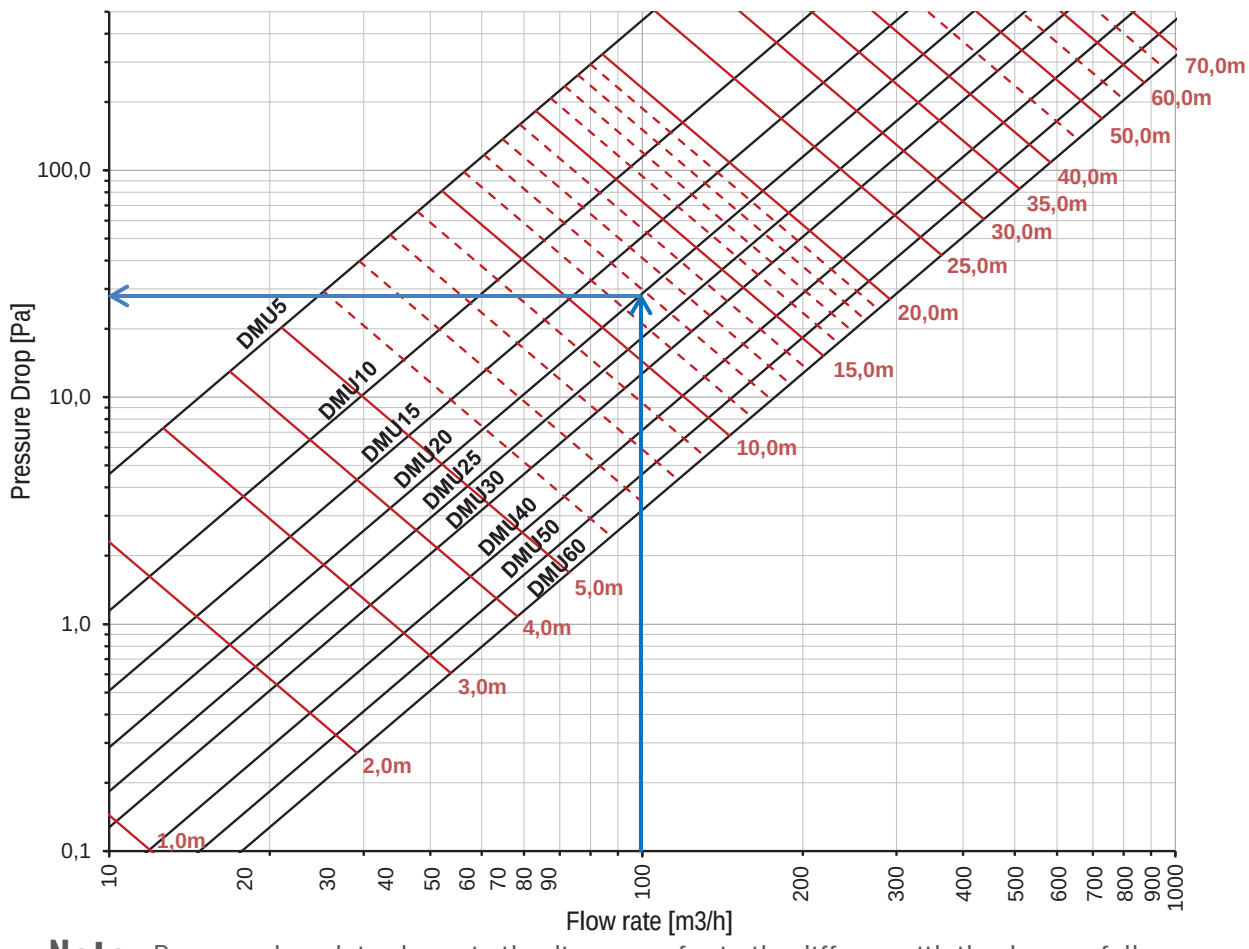


Diagram 1

The diagram shows the air speed exiting the diffuser based on the flow rate with relative indication of the horizontal launch obtainable with terminal speed (Vt) of 0,50m/s. The horizontal launch data are to be understood in isothermal conditions. For ΔT < 10°C multiply the horizontal throw by 0,85.

CALCULATION (input data)	
Flow Rate	100mc
Max. Air Speed	7m/s
Isothermal Horizontal Throw	12mt

Flow Rate / Pressure Drop / Throw (Vt.: 0,50m/s)



SELECTION	
Model	DMU20
Flow Rate	101 m^3/h
Isothermal Horizontal Throw	7m/s
Isothermal HoriThrow	12m

Diagram 2

The diagram shows the diffuser pressure drop based on the flow rate with relative indication of the horizontal launch obtainable with terminal speed (Vt) of 0,50m/s. The horizontal launch data are to be understood in isothermal conditions. For ΔT < 10°C multiply the horizontal throw by 0,85.

Note: Pressure drop data shown in the diagram refer to the diffuser with the damper fully open.

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MODEL	DESCRIPTION	U.M.	Vi (m/sec)												
			1	2	3	4	5	6	7	8	9	10	15	20	26
DMU 5 Ak: 0,0010m2	Flow Rate	m3/h	4	7	11	14	18	22	25	29	33	36	54	72	94
	Pressure Drop	Pa	0,6	2,4	5,4	9,6	15,0	21,6	29,4	38,4	48,6	60,0	135,0	240,0	405,6
	Horizontal Throw Vt 0,50	mt	0,9	1,7	2,6	3,4	4,3	5,2	6,0	6,9	7,7	8,6	12,9	17,2	22,4
DMU 10 Ak: 0,0020m2	Flow Rate	m3/h	7	14	22	29	36	43	51	58	65	72	109	145	188
	Pressure Drop	Pa	0,6	2,4	5,4	9,6	15,0	21,6	29,4	38,4	48,6	60,0	135,0	240,0	405,6
	Horizontal Throw Vt 0,50	mt	1,2	2,4	3,6	4,9	6,1	7,3	8,5	9,7	10,9	12,2	18,2	24,3	31,6
DMU 15 Ak: 0,0030m2	Flow Rate	m3/h	11	22	33	43	54	65	76	87	98	109	163	217	282
	Pressure Drop	Pa	0,6	2,4	5,4	9,6	15,0	21,6	29,4	38,4	48,6	60,0	135,0	240,0	405,6
	Horizontal Throw Vt 0,50	mt	1,5	3,0	4,5	6,0	7,4	8,9	10,4	11,9	13,4	14,9	22,3	29,8	38,7
DMU 20 Ak: 0,0040m2	Flow Rate	m3/h	14	29	43	58	72	87	101	116	130	145	217	290	376
	Pressure Drop	Pa	0,6	2,4	5,4	9,6	15,0	21,6	29,4	38,4	48,6	60,0	135,0	240,0	405,6
	Horizontal Throw Vt 0,50	mt	1,7	3,4	5,2	6,9	8,6	10,3	12,0	13,8	15,5	17,2	25,8	34,4	44,7
DMU 25 Ak: 0,0050m2	Flow Rate	m3/h	18	36	54	72	90	109	127	145	163	181	271	362	470
	Pressure Drop	Pa	0,6	2,4	5,4	9,6	15,0	21,6	29,4	38,4	48,6	60,0	135,0	240,0	405,6
	Horizontal Throw Vt 0,50	mt	1,9	3,8	5,8	7,7	9,6	11,5	13,5	15,4	17,3	19,2	28,8	38,5	50,0
DMU 30 Ak: 0,0060m2	Flow Rate	m3/h	22	43	65	87	109	130	152	174	195	217	326	434	565
	Pressure Drop	Pa	0,6	2,4	5,4	9,6	15,0	21,6	29,4	38,4	48,6	60,0	135,0	240,0	405,6
	Horizontal Throw Vt 0,50	mt	2,1	4,2	6,3	8,4	10,5	12,6	14,7	16,9	19,0	21,1	31,6	42,1	54,8
DMU 40 Ak: 0,0080m2	Flow Rate	m3/h	29	58	87	116	145	174	203	232	261	290	434	579	753
	Pressure Drop	Pa	0,6	2,4	5,4	9,6	15,0	21,6	29,4	38,4	48,6	60,0	135,0	240,0	405,6
	Horizontal Throw Vt 0,50	mt	2,4	4,9	7,3	9,7	12,2	14,6	17,0	19,5	21,9	24,3	36,5	48,6	63,2
DMU 50 Ak: 0,0100m2	Flow Rate	m3/h	36	72	109	145	181	217	253	290	326	362	543	724	941
	Pressure Drop	Pa	0,6	2,4	5,4	9,6	15,0	21,6	29,4	38,4	48,6	60,0	135,0	240,0	405,6
	Horizontal Throw Vt 0,50	mt	2,7	5,4	8,2	10,9	13,6	16,3	19,0	21,8	24,5	27,2	40,8	54,4	70,7
DMU 60 Ak: 0,0121m2	Flow Rate	m3/h	43	87	130	174	217	261	304	347	391	434	651	869	1129
	Pressure Drop	Pa	0,6	2,4	5,4	9,6	15,0	21,6	29,4	38,4	48,6	60,0	135,0	240,0	405,6
	Horizontal Throw Vt 0,50	mt	3,0	6,0	8,9	11,9	14,9	17,9	20,9	23,8	26,8	29,8	44,7	59,6	77,5

Note: the data indicated refer to operation in isothermal conditions

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