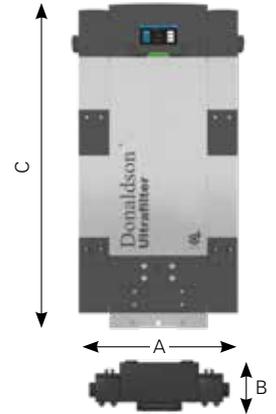


# ULTRAPAC SMART TECHNICAL DATA

Ultracpac Smart Superplus		Volume flow rate* inlet m <sup>3</sup> /h	Regeneration air consumption* m <sup>3</sup> /h	Compressed air connection Inch	Dimensions		
					Width (A) mm	Height (C) mm	Depth (B) mm
Mini	0005	5	0.85	1/2	314	497	114
	0010	10	1.70	1/2	314	764	114
	0015	15	2.55	1/2	314	1031	114
	0020	20	3.40	1/2	314	1298	114
	0025	25	4.25	1/2	314	1565	114
Midi	0035	35	5.95	1	464	866	168
	0050	50	8.50	1	464	1130	168
	0065	65	11.05	1	464	1394	168
	0080	80	13.60	1	464	1658	168
	0100	100	17.00	1	464	1922	168



Explanations: \* related to the intake condition of the compressor +20 °C, 1 bar (abs), at compressed air inlet temperature of +35 °C and 7 bar (g) operating pressure. Pressure dew point: -40 °C, minimum pressure: 4 bar (g), maximum pressure: 16 bar (g) (type 0005 to 0025), 12 bar (g) (type 0035 to 0100), inlet temperature: min +5 °C, max +55 °C (dimensioning see below).

## Sizing

f	4 bar (g)	5 bar (g)	6 bar (g)	7 bar (g)	8 bar (g)	9 bar (g)	10 bar (g)	11 bar (g)	12 bar (g)	13 bar (g)	14 bar (g)	15 bar (g)	16 bar (g)
20 °C	0.91	0.99	1.08	1.16	1.23	1.30	1.37	1.43	1.49	1.55	1.61	1.66	1.72
25 °C	0.89	0.98	1.07	1.15	1.22	1.29	1.36	1.42	1.47	1.53	1.59	1.65	1.70
30 °C	0.83	0.97	1.06	1.13	1.21	1.27	1.34	1.40	1.46	1.51	1.56	1.62	1.67
35 °C	0.63	0.75	0.88	1.00	1.12	1.25	1.33	1.39	1.45	1.50	1.55	1.60	1.65
40 °C	0.48	0.57	0.67	0.76	0.86	0.95	1.05	1.14	1.24	1.33	1.43	1.52	1.62
45 °C	0.37	0.44	0.51	0.58	0.66	0.73	0.81	0.88	0.95	1.03	1.10	1.17	1.25
50 °C	0.28	0.34	0.40	0.46	0.51	0.57	0.63	0.68	0.74	0.79	0.85	0.91	0.97
55 °C	0.22	0.27	0.31	0.36	0.40	0.44	0.49	0.53	0.58	0.62	0.67	0.71	0.76

Maximum operating pressure 16 bar (g) (type 0005 to 0025), 12 bar (g) (type 0035 to 0100).

$\dot{V}_{corr} = \frac{\dot{V}_{nom}}{f}$  Example:  $\dot{V}_{nom} = 22 \text{ m}^3/\text{h}$ , inlet temperature = 25 °C, operating pressure = 12 bar (g)

$\dot{V}_{korr} = \frac{22 \text{ Nm}^3/\text{h}}{1.47} = 14,97 \text{ Nm}^3/\text{h}$   
calculated dryer size: **Ultracpac Smart, type 0015**

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[CAP-europe@donaldson.com](mailto:CAP-europe@donaldson.com) · [www.donaldson.com](http://www.donaldson.com)

## PRODUCT SPECIFICATIONS

HED/ ALD/ MSD	Volume flow in m³/h (1 bar, 20°C)*	Regeneration air losses average m³/h (1 bar, 20°C)			Volume flow out (min.) m³/h (1 bar, 20°C)			Pressure loss initial mbar	Prefilter and Afterfilter UltraPleat® S
		HED	ALD	MSD	HED	ALD	MSD		
0050	50	7,0	7,5	10	41,4	40,8	37,7	70	0210
0080	80	11,2	12,0	16	66,2	65,2	60,3	85	0210
0100	100	14,0	15,0	20	82,8	81,6	75,4	90	0210
0150	150	21,0	23,0	30	124,2	121,7	113,1	140	0210
0175	175	24,5	26,3	35	144,9	142,7	132,0	75	0210
0225	225	31,5	34,0	45	186,3	183,2	170,0	90	0450
0300	300	42,0	45,0	60	248,3	244,7	226,2	125	0450
0375	375	52,5	56,0	75	310,4	306,1	282,8	150	0450
0550	550	77,0	83,0	110	455,3	447,9	414,7	150	0600
0650	650	91,0	98,0	130	538,1	529,5	490,1	185	0750
0850	850	119,0	128,0	170	703,6	692,6	640,9	220	1100
1000	1000	140,0	150,0	200	827,8	815,5	754,0	185	1100

\* related to 1 bar (abs) and 20 °C at intake of compressor and 7 bar (g) and 35 °C inlet temperature

Compressed air quality class according to ISO 8573-1		
HED	ALD	MSD
1-2 : 3 : 2	1-2 : 2 : 2	1-2 : 1-2 : 2

## SIZING

Type	Pressure dewpoint (PDP)	Residual water content	Inlet temperature	Operating pressure (bar)												
				4	5	6	7	8	9	10	11	12	13	14	15	16
HED ALD	-20°C	0,88 g/m³ 0,11 g/m³	25°C	0,75	0,90	1,05	1,20	1,35	1,50	1,65	1,80	1,95	2,10	2,25	2,40	2,55
	30°C		0,69	0,83	0,96	1,10	1,24	1,38	1,51	1,65	1,79	1,93	2,06	2,20	2,34	
	35°C		0,63	0,75	0,88	1,00	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13	
MSD	-40°C	0,11 g/m³	25°C	0,75	0,90	1,05	1,20	1,35	1,50	1,65	1,80	1,95	2,10	2,25	2,40	2,55
	30°C		0,69	0,83	0,96	1,10	1,24	1,38	1,51	1,65	1,79	1,93	2,06	2,20	2,34	
	35°C	0,63	0,75	0,88	1,00	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13		
	≤ -40°C* ↑ DTP	0,0027 g/m³	40°C	0,50	0,60	0,70	0,80	0,90	1,00	1,10	1,20	1,30	1,40	1,50	1,60	1,70
	↓ ≥ -70°C*		45°C	0,44	0,53	0,61	0,70	0,79	0,88	0,96	1,05	1,14	1,23	1,31	1,40	1,49
	50°C		0,31	0,38	0,44	0,50	0,56	0,63	0,69	0,75	0,81	0,88	0,94	1,00	1,06	
* on request			Correction factors (f)													

### Example:

$\dot{V}_{nom} = 200 \text{ m}^3/\text{h}$ , inlet temperature = 30°C, operating pressure = 10 bar (g), PDP = -40°C

$$\dot{V}_{korr} = \frac{\dot{V}_{nom}}{f} = \frac{200 \text{ m}^3/\text{h}}{1,51} = 132,5 \text{ m}^3/\text{h}$$

**Calculated dryer size:  
ALD, Type 0150**

## PRODUCT SPECIFICATIONS

HED/ ALD/ MSD	Volume flow in m³/h (1 bar, 20°C)*	Regeneration air losses average m³/h (1 bar, 20°C)			Volume flow out (min.) m³/h (1 bar, 20°C)			Pressure loss initial mbar	Prefilter (Afterfilter) M (PE)
		HED	ALD	MSD	HED	ALD	MSD		
1350	1350	189	202,5	270	1102,77	1093,93	1013	190	30/30
1650	1650	231	247,5	330	1347,71	1336,93	1238	230	30/30
1950	1950	273	292,5	390	1592,65	1579,91	1463	160	30/50
2250	2250	315	337,5	450	1837,59	1822,89	1688	180	30/50
2750	2750	385	412,5	550	2245,83	2227,86	2063	240	30/50
3500	3500	490	525	700	2857,63	2834,77	2625	280	3-20/30
4000	4000	560	600	800	3265,84	3239,74	3000	140	4-30/30
5000	5000	700	750	1000	4082,33	4049,68	3750	170	4-30/30
6000	6000	840	900	1200	4898,8	4859,61	4500	220	4-30/30
7000	7000	980	1050	1400	5715,27	5669,55	5250	260	4-30/30
8750	8750	1225	1312,5	1750	7144,63	7087,47	6563	160	8-30/30

\* related to 1 bar (abs) and 20 °C at intake of compressor and 7 bar (g) and 35 °C inlet temperature

## SIZING

Type	Pressure dewpoint (PDP)	Residual water content	Inlet temperature	Operating pressure (bar)												
				4	5	6	7	8	9	10	11	12	13	14	15	16
HED ALD	-20°C -40°C	0,88 g/m³ 0,11 g/m³	25°C	0,75	0,90	1,05	1,20	1,35	1,50	1,65	1,80	1,95	2,10	2,25	2,40	2,55
			30°C	0,69	0,83	0,96	1,10	1,24	1,38	1,51	1,65	1,79	1,93	2,06	2,20	2,34
			35°C	0,63	0,75	0,88	1,00	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13
MSD	-40°C ≤ -40°C* ↑ DTP ↓ ≥ -70°C*	0,11 g/m³	25°C	0,75	0,90	1,05	1,20	1,35	1,50	1,65	1,80	1,95	2,10	2,25	2,40	2,55
			30°C	0,69	0,83	0,96	1,10	1,24	1,38	1,51	1,65	1,79	1,93	2,06	2,20	2,34
			35°C	0,63	0,75	0,88	1,00	1,13	1,25	1,38	1,50	1,63	1,75	1,88	2,00	2,13
		40°C	0,50	0,60	0,70	0,80	0,90	1,00	1,10	1,20	1,30	1,40	1,50	1,60	1,70	
		45°C	0,44	0,53	0,61	0,70	0,79	0,88	0,96	1,05	1,14	1,23	1,31	1,40	1,49	
		50°C	0,31	0,38	0,44	0,50	0,56	0,63	0,69	0,75	0,81	0,88	0,94	1,00	1,06	
* on request			Correction factors (f)													

### Example:

$\dot{V}_{nom} = 2500 \text{ m}^3/\text{h}$ , inlet temperature = 30°C, operating pressure = 10 bar (g), PDP = -40°C

$$\dot{V}_{korr} = \frac{\dot{V}_{nom}}{f} = \frac{2500 \text{ m}^3/\text{h}}{1,51} = 1655,6 \text{ m}^3/\text{h}$$

**Calculated dryer size:  
ALD, Typ 1950**