






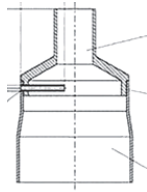
Hot air nozzles

Model	Description	Width mm	Thickness mm	PU	Order No.
TNR 25	Round nozzle, without vacuum			1	T005 87 687 42N
					
TNR 40	Round nozzle, bent, without vacuum			1	T005 87 687 43N
					
TNR 70	Round nozzle, bent, without vacuum			1	T005 87 687 44N
					

Model	Description	Width mm	Thickness mm	PU	Order No.
TNRB 17	Round nozzle, bent, without vacuum			1	T005 87 687 45N
					
TNRB 60	Round nozzle, bent, without vacuum			1	T005 87 687 46N
					



Order No.	Description
T0058768755N	TNM Measuring nozzle WTHA1



Order No.	Description
T0058768747N	Adapter for nozzles from WHA 900 to be used with WTHA 1



Hot air nozzles for HAP 1, HAP 200 and WXHAP 200

Flat nozzle

Model	Description	Width mm	Thickness mm	PU	Order No.
F02	Flat nozzle	8	1.5	1	T005 87 277 74N
F04	Flat nozzle	10.5	1.5	1	T005 87 277 73N
F06	Flat nozzle	12.0	1.5	1	T005 87 277 72N







Model	Description	Diameter mm	Distance mm	Length mm	PU	Order no.
R02	Round nozzle	0,8 mm		17	1	T005 87 278 23
R04	Round nozzle	1,2 mm		17	1	T005 87 278 21
R06	Round nozzle	3,0 mm		17	1	T005 87 278 22
R10	Round Nozzle Long	2,0 mm		50	1	T005 87 277 87N
R08	Round nozzle long bent	2,0 mm		50	1	T005 87 277 86N
FD2	Dual nozzle	1,5 mm	8 mm		1	T005 87 277 76
FD4	Dual nozzle	1,5 mm	10 mm		1	T005 87 277 75



2 sides heated (Type D, Length X =heated side)

Model	Description	Length mm	Width mm	PU	Order No.
D04 	Hot Air Nozzle, Two Sides Heated, with pre-heating plate	10.5	10.5	1	T005 87 277 79N
D06 	Hot Air Nozzle, Two Sides Heated, with pre-heating plate	13.0	10.0	1	T005 87 277 82N
D08 	Hot Air Nozzle, Two Sides Heated, with pre-heating plate	15	10.0	1	T005 87 277 81N
D10 	Hot Air Nozzle, Two Sides Heated, with pre-heating plate	18	10.0	1	T005 87 277 84N









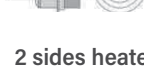
4 sides heated (Type Q)

Model	Description	Length mm	Width mm	PU	Order No.
Q02 	Hot air nozzle, 4 sides heated	6.0	6.5	1	T005 87 277 77N
Q04 	Hot air nozzle, 4 sides heated	6.0	9.0	1	T005 87 277 78N
Q06 	Hot air nozzle, 4 sides heated, with pre-heating plate	15	10.0	1	T005 87 277 80N
Q08 	Hot air nozzle, 4 sides heated, with pre-heating plate	12.5	15	1	T005 87 277 83N
Q10 	Hot air nozzle, 4 sides heated, with pre-heating plate	18	18.0	1	T005 87 277 85N
R01 	Measuring nozzle			1	T005 87 278 08N



Hot air nozzles for HAP 3000 (WHA 3000P / V), HAP 2 (WHA 2000) and HAP 3 (WHA 700, WHA 300)

Round nozzle

















Model	Description	Diameter	PU	Order No.
 NR04	Round nozzle, without vacuum	2,5 mm	1	T005 87 368 81N
 NR05	Round nozzle, without vacuum	4,0 mm	1	T005 87 368 67N
 NR10	Round nozzle, without vacuum	7,0 mm	1	T005 87 368 70N
 NRV07	Hot air nozzle with vacuum for small components	7,0 mm	1	T005 87 507 70N
 NRV10	Hot air nozzle with vacuum for small components	10,0 mm	1	T005 87 507 72N
 NRV12	Hot air nozzle with vacuum for small components	12,0 mm	1	T005 87 507 74N
 NR02	Round nozzle, without vacuum	1,7 mm x 45°	1	T005 87 368 82N
 NR06	Round nozzle, without vacuum	6,0 mm x 45°	1	T005 87 507 65N
 DR05	Dual nozzle round, without vacuum	2 x 2,5	1	T005 87 368 83N

2 sides heated (type ND, Width X = heated side)

Model	Description	Length mm	Width mm	PU	Order No.
 ND05	Hot air nozzle, 2 sides heated	10.7	10.7	1	T005 87 368 43N
 ND10	Hot air nozzle, 2 sides heated	14	10.0	1	T005 87 368 42N
 ND15	Hot air nozzle, 2 sides heated	19	12.0	1	T005 87 368 41N
 ND20	Hot air nozzle, 2 sides heated	21.5	14.8	1	T005 87 368 40N



Four sides heated (Type NQ)

Model	Description	Length mm	Width mm	PU	Order No.
 NQ05	Hot air nozzle, four sides heated	10.7	10.7	1	T005 87 368 39N
 NQ15	Hot air nozzle, four sides heated	14.5	10.0	1	T005 87 368 38N
 NQ10	Hot air nozzle, four sides heated	14.8	14.8	1	T005 87 368 18N
 NQ20	Hot air nozzle, four sides heated	15.5	13.0	1	T005 87 368 37N
 NQ25	Hot air nozzle, four sides heated	18	18.0	1	T005 87 368 14N
 NQ30	Hot air nozzle, four sides heated	17.5	23.5	1	T005 87 507 21N
 NQ35	Hot air nozzle, four sides heated	20.5	20.5	1	T005 87 368 07N
 NQ	Hot air nozzle, four sides heated	24	12.0	1	T005 87 368 80N
 NQ40	Hot air nozzle, four sides heated	26	26.0	1	T005 87 368 04N
 NQ45	Hot air nozzle, four sides heated	31.3	31.3	1	T005 87 368 33N
 NQ50	Hot air nozzle, four sides heated	36	36.0	1	T005 87 368 91N
 NQ55	Hot air nozzle, four sides heated	43.0	43.0	1	T005 87 368 90N
 NQT10	Hot air nozzle, 4 sides heated, without protruding edge	14.8	14.8	1	T005 87 507 41N
 NQT25	Hot air nozzle, 4 sides heated, without protruding edge	18	18.0	1	T005 87 507 42N
 NQT	Hot air nozzle, 4 sides heated, without protruding edge	22	22.0	1	T005 87 507 39N
 NA 20	Measuring nozzle			1	T005 87 368 75N



Pre heating nozzle for HAP 3



Order No.	Description
T005 87 578 92	Pre heating nozzle for HAP 3

Multi rest



Order No.	Description
T005 15 048 99N	Depositing rack for NR, ND, NQ Hot Air Nozzles for WHA 3000V and WHA 3000P (max. 6 nozzles)

Vacuum insert for CSF heads (spare)



Order No.	Description
T005 87 137 99	Vacuum insert Ø 4,5 mm
T005 87 137 98	Vacuum insert Ø 10 mm

Soldering Stations

Soldering iron
and safety restSoldering tips
and nozzles

Preheating plates

Soldering bathes

Circuit board holder

Solder feeder

Hot air heating gun

Temperature
measuring

Accessories



Hot air nozzles for WQB

Model	inside	outside	PU	Order No.
Hot air nozzle 6,5 x 6,5 mm	6,5 x 6,5 mm	7,5 x 7,5 mm	1	T005 87 479 43
Hot air nozzle 7,6 x 7,99 mm	7,6 x 7,99 mm	8,6 x 8,9 mm	1	T005 87 479 47
Hot air nozzle 8,5 x 8,5 mm	8,5 x 8,5 mm	9,5 x 9,5 mm	1	T005 87 479 45
Hot air nozzle 8,5 x 10,6 mm	8,5 x 10,6 mm	9,5 x 11,6 mm	1	T005 87 479 61
Hot air nozzle 8,5 x 22 mm	8,5 x 22 mm	9,5 x 23 mm	1	T005 87 558 64N
Hot air nozzle 9,0 x 8,0 mm	9,0 x 8,0 mm	10,0 x 9,0	1	T005 87 667 04
Hot air nozzle 10,0 x 10,0 mm	10,0 x 10,0 mm	11,0 x 11,0 mm	1	T005 87 549 67
Hot air nozzle 10,5 x 12,0 mm	10,5 x 12,0 mm	11,5 x 13,0	1	T005 87 667 37
Hot air nozzle 11,0 x 8,0 mm	11,0 x 8,0 mm	12,0 x 9,0	1	T005 87 667 10
Hot air nozzle 11,5 x 9,5 mm	11,5 x 9,5 mm	12,5 x 10,5	1	T005 87 667 16
Hot air nozzle 12,0 x 12,0 mm	12,0 x 12,0 mm	13,0 x 13,0 mm	1	T005 87 478 48
Hot air nozzle 12,5 x 12,5 mm	12,5 x 12,5 mm	13,5 x 13,5	1	T005 87 547 87
Hot air nozzle 13,5 x 11,5 mm	13,5 x 11,5 mm	14,5 x 12,5	1	T005 87 667 18
Hot air nozzle 13,5 x 13,5 mm	13,5 x 13,5 mm	14,3 x 14,3 mm	1	T005 87 479 04
Hot air nozzle 14,0 x 6,0 mm	14,0 x 6,0 mm	15,0 x 7,0	1	T005 87 667 14
Hot air nozzle 15,0 x 11,0 mm	15,0 x 11,0 mm	16,0 x 12,0 mm	1	T005 87 478 93
Hot air nozzle 15,5 x 15,5 mm	15,5 x 15,5 mm	16,5 x 16,5 mm	1	T005 87 479 35
Hot air nozzle 15,5 x 23,5 mm	15,5 x 23,5 mm	16,5 x 24,5 mm	1	T005 87 479 77
Hot air nozzle 17,0 x 17,0 mm	17,0 x 17,0 mm	18,0 x 18,0	1	T005 87 558 62
Hot air nozzle 17,0 x 25,0 mm	17,0 x 25,0 mm	18,0 x 26,0	1	T005 87 557 54
Hot air nozzle 18,0 x 13,0 mm	18,0 x 13,0 mm	19,0 x 14,0	1	T005 87 557 94
Hot air nozzle 18,0 x 18,0 mm	18,0 x 18,0 mm	20,0 x 20,0 mm	1	T005 87 478 33
Hot air nozzle 18,5 x 10,0 mm	18,5 x 10,0 mm	19,5 x 11,0 mm	1	T005 87 548 36
Hot air nozzle 19 x 19 mm	19,0 x 19,0	21,0 x 21,0	1	T005 87 559 95
Hot air nozzle 21,0 x 21,0 mm	21,0 x 21,0 mm	23,0 x 23,0 mm	1	T005 87 547 70



Model	inside	outside	PU	Order No.
Hot air nozzle 22,0 x 22,0 mm	22,0 x 22,0 mm	24,0 x 24,0 mm	1	T005 87 548 20
Hot air nozzle 22,5 x 17,0 mm	22,5 x 17,0 mm	23,5 x 18,0 mm	1	T005 87 667 06
Hot air nozzle 23,0 x 23,0 mm	23,0 x 23,0 mm	24,0 x 24,0 mm	1	T005 87 667 08
Hot air nozzle 25,0 x 19,0 mm	25,0 x 19,0 mm	26,0 x 20,0 mm	1	T005 87 667 02
Hot air nozzle 25, 0 x 25, 0 mm	25,0 x 25,0 mm	27,0 x 27,0 mm	1	T005 87 477 64
Hot air nozzle 27,0 x 23,0 mm	27,0 x 23,0 mm	29,0 x 25,0 mm	1	T005 87 479 93
Hot air nozzle 27,0 x 27,0 mm	27,0 x 27,0 mm	29,0 x 29,0 mm	1	T005 87 478 50
Hot air nozzle 28, 0 x 32, 0 mm	28,0 x 32,0 mm	30,0 x 34,0 mm	1	T005 87 479 99
Hot air nozzle 29,0 x 21,0 mm	29,0 x 21,0 mm	31,0 x 23,0 mm	1	T005 87 557 92
Hot air nozzle 29,0 x 29,0 mm	29,0 x 29,0 mm	31,0 x 31,0 mm	1	T005 87 479 27
Hot air nozzle 32 x 39 mm	32,0 x 39,0 mm	34,0 x 41,0 mm	1	T005 87 667 65
Hot air nozzle 33, 0 x 33, 0 mm	33,0 x 33,0 mm	35,0 x 35,0 mm	1	T005 87 479 06
Hot air nozzle 35,0 x 35,0 mm	35,0 x 35,0 mm	37,0 x 37,0 mm	1	T005 87 548 87
Hot air nozzle 37,0 x 37,0 mm	37,0 x 37,0 mm	39,0 x 39,0 mm	1	T005 87 477 53
Hot air nozzle 45° 37,0 x 37,0 mm	37,0 x 37,0 mm	39,0 x 39,0 mm	1	T005 87 549 68N
Hot air nozzle 39,5 x 39,5 mm	39,5 x 39,5 mm	41,5 x 41,5 mm	1	T005 87 478 71
Hot air nozzle 42,0 x 8,0 mm	42,0 x 8,0 mm	50,0 x 10,0 mm	1	T005 87 557 80
Hot air nozzle 42,0 x 36,0 mm	42,0 x 36,0 mm	44,0 x 38,0 mm	1	T005 87 557 90
Hot air nozzle 42,0 x 42,0 mm	42,0 x 42,0 mm	44,0 x 44,0 mm	1	T005 87 478 74
Hot air nozzle 43,5 x 33,5 mm	43,5 x 33,5 mm	45,5 x 35,5 mm	1	T005 87 557 88
Hot air nozzle 45,0 x 11,0 mm	45,0 x 11,0 mm	47,0 x 13,0 mm	1	T005 87 549 03
Hot air nozzle 45,0 x 26,0 mm	45,0 x 26,0 mm	47,0 x 28,0 mm	1	T005 87 549 05
Hot air nozzle 46,0 x 46,0 mm	46,0 x 46,0 mm	48,0 x 48,0 mm	1	T005 87 477 63
Hot air nozzle 47, 0 x 47, 0 mm	47,0 x 47,0 mm	49,0 x 49,0 mm	1	T005 87 479 16
Hot air nozzle 49,0 x 49,0 mm	49,0 x 49,0 mm	51,0 x 51,0 mm	1	T005 87 479 41
Hot air nozzle 52,0 x 8,0 mm	52,0 x 8,0 mm	60,0 x 10,0	1	T005 87 667 12

Soldering Stations

Soldering iron
and safety restSoldering tips
and nozzles

Preheating plates

Soldering bathes

Circuit board holder

Solder feeder

Hot air heating gun

Temperature
measuring

Accessories



Soldering tips and nozzles | Hot air nozzles

Model	inside	outside	PU	Order No.
Hot air nozzle 52,0 x 52,0 mm	52,0 x 52,0 mm	54,0 x 54,0	1	T005 87 557 79
Hot air nozzle 55, 5 x 27,0 mm	55,5 x 27 mm	57,5 x 29 mm	1	T005 87 667 62N
Hot air nozzle 57,0 x 18,5 mm	57,0 x 18,5 mm	59,0 x 20,0 mm	1	T005 87 479 85
Hot air nozzle 60 x 60 mm	60,0 x 60,0 mm	62,0 x 62,0	1	T005 87 557 84N
Hot air nozzle 70,0 x 40,0 mm	70,0 x 40,0 mm	72,0 x 42,0	1	T005 87 667 35N
Hot air nozzle 70 x 60 mm	70,0 x 60,0 mm	72,0 x 62,0	1	T005 87 557 50N
Hot air nozzle 80,0 x 18,5 mm	80,0 x 18,5 mm	82,0 x 20,5	1	T005 87 667 20
Hot air nozzle 80,0 x 20,0 mm	80,0 x 20,0 mm	82,0 x 22,0	1	T005 87 557 61N
Reflow hot air nozzle 90,0 x 90,0 mm	90,0 x 90,0 mm	92,0 x 92,0	1	T005 87 558 96
Adapter for NQ nozzles WQB			1	T005 87 477 70