

MINITHERM THE FEATHERWEIGHT TORCH WITH HEAVYWEIGHT PERFORMANCE

The MINITHERM® product range has been developed in accordance with the requirements of industry and trade for a small and lightweight injector torch to cover special demands.

Compared with conventional hand torches the considerably lower weight of our MINITHERM® handles and attachments enable fatigue-free continuous working. This is of particular advantage in pipework construction, in manufacturing of jewellery, dental laboratories and precision parts as well as for mass production of hand-welded, brazed or heat-treated components.

Due to the small handle size any welding, brazing and heating work in difficult areas and hard to reach locations can usually be carried out with adequate freedom of movement. The entire MINITHERM® product range complies with the requirements of the "Accident Prevention Regulations for Welding, Cutting and Allied Processes" (BGVD1) as well as of DIN 8543.

- High level of safety thanks to the injector suction principle:
The mixing of Oxygen with fuel gas takes place using the under-pressure mixing system. This prevents the intrusion of fuel gas into the Oxygen supply. MINITHERM® torches meet the requirements of the established accident prevention regulations.
- Universal range of applications:
A wide range of torch inserts with varying flame characteristics and flame powers offers a virtually seamless range of applications from the barely visible micro flame up to the powerful welding flame.
- Large freedom of movement through small size:
Through the compact size of the handle and inserts it is possible to carry out welding, brazing, soldering and heating tasks even at hard to access locations without any problems
- Fatigue free working through the low weight:
The low weights of the handle and inserts make the MINITHERM® torch significantly lighter than conventional oxyfuel hand equipment. This ensures fatigue-free operation and gives high production quality.
- Comprehensive accessory program:
The MINITHERM® program includes various pressure regulators, safety devices, hoses for Oxygen and different types of fuel gasses, torch rests, flame ignition accessories and a broad range of accessories to enable the widest variety of applications to be tackled smoothly.



High-performance kits for welding, brazing and heating

KITS

Description	Art. No.	Cat. No.
MINITHERM HA for acetylene	716. 01407	010
MINITHERM PMYE for propane, methane, Mapp, ethylene	716. 01408	010
each consisting of: 1 MINITHERM handle, with mounted oxygen and fuel gas hoses, length 3 m 5 welding, brazing and heating tips MINITHERM size 00 to 3 Operating instruction		



Small handle with high flow efficiency, for welding, brazing and heating

HANDLES

Description	Art. No.	Cat. No.
Type MINITHERM with 3,2 mm hose connection	716.06109	024
Type MINITHERM with mounted oxygen and fuel gas hoses, length 3 m	716. 06111	024
Length: 120 mm (without hose connection), shaft diameter: 10 mm, weight approx. 90 g (without hoses)		
The MINITHERM small handle provides the basis for particularly difficult and sensitive applications when using the oxyfuel flame constantly, in extremely small areas, and in places that are not accessible with conventional torches.		



Welding, brazing and heating tips with central flame outlet, nozzles replaceable

TIPS TYPE Z

Size	O ₂ -Consumption	Welding range	Art. No. Type Z-HA	Art. No. Type Z-PMYE	Cat. No.
00	20-55 l/h	to 0,3 mm	716.00978	716.00988	024
0	28-72 l/h	0,2-0,5 mm	716.00979	716.00989	024
1	58-150 l/h	0,5-1,0 mm	716.00980	716.00990	024
2	150-285 l/h	1,0-2,0 mm	716.00981	716.00991	024
3	215-440 l/h	2,0-4,0 mm	716.00982	716.00992	024

MINITHERM Z-HA tips for welding, brazing and heating with acetylene
MINITHERM Z-PMYE tips for brazing and heating with propane, methane, Mapp, ethylene



WELDING, BRAZING AND HEATING TIPS, FORKED TORCHES

TIPS TYPE FK

Brazing, heating and melting tips with laminar flame outlet, nozzles replaceable



Size	O ₂ -Consumption	Art. No. Type HA	Art. No. Type PMYE	Cat. No.
FK 1	210-350 l/h	716.50808	716.50804	024
FK 2	210-420 l/h	716.50809	716.50805	024

MINITHERM FK-HA tips for brazing, heating and melting with acetylene, hydrogen
MINITHERM FK-PMYE tips for brazing, heating and melting with propane, methane, Mapp, ethylene

FORKED TORCH TYPE Z

For heating and brazing, with central flame outlet



Size	O ₂ -Consumption	Art. No. Type Z-HA	Art. No. Type Z-PMYE	Cat. No.
Z 0	56-140 l/h	716.50464 *	716.50469 *	039
Z 1	210-300 l/h	716.50465 *	716.50470 *	039
Z 2	310-570 l/h	716.02560 *	716.50471 *	039
Z 3	430-880 l/h	716.50466 *	716.50472 *	039

Forked torch MINITHERM Z-HA for heating and brazing with acetylene, hydrogen
Forked torch MINITHERM Z-PMYE for heating and brazing with propane, methane, Mapp, ethylene

FORKED TORCH TYPE FK

For heating and brazing, with laminar flame outlet



Size	O ₂ -Consumption	Art. No. Type Z-HA	Art. No. Type Z-PMYE	Cat. No.
FK 1	420-700 l/h	716.50820 *	716.50828 *	039
FK 2	550-840 l/h	716.50821 *	716.50829 *	039

Forked torch MINITHERM Z-HA for heating and brazing with acetylene, hydrogen
Forked torch MINITHERM Z-PMYE for heating and brazing with propane, methane, Mapp, ethylene

FORKED TORCH TYPE FK

Replaceable nozzles for brazing, heating and melting tips and forked torches type FK



Size	Art. No. Type HA	Art. No. Type PMYE	Cat. No.
FK 1	716.50798	716.50800	039
FK 2	716.50799	716.50810	039
FK 3		716.50810 *	039

Heating nozzles FK-HA, for brazing, heating and melting tips and forked torch MINITHERM FK-HA
Heating nozzles FK-PMYE, for brazing, heating and melting tips and forked torch MINITHERM FK-PMYE

Small tips stretched

MICRO-TIPS M-HA

Size	O ₂ - Consumption	O ₂ -Pressure	Injector	Art. No.	Cat. No.
2	6 -9 l/h	0,2 - 0,5 bar	716.50813	716.05789	004
3	9 - 15 l/h	0,5 - 1,5 bar	716.50813	716.05790	004
4	32-39 l/h	0,5-0,8 bar	716.50814	716.05791	004
5	39-43 l/h	0,8-1,0 bar	716.50814	716.05792	004
6	43-54 l/h	1,0-1,5 bar	716.50814	716.05793	004
7	54-76 l/h	1,5-2,5 bar	716.50814	716.05794	004



Tips MINITHERM M-HA will be supplied without injector.

Small tips curved

MICRO-TIPS MG-HA

Size	O ₂ - Consumption	O ₂ -Pressure	Injector	Art. No.	Cat. No.
2	6 -9 l/h	0,2 - 0,5 bar	716.50813	716.05783	004
3	9 - 15 l/h	0,5 - 1,5 bar	716.50813	716.05784	004
4	32-39 l/h	0,5-0,8 bar	716.50814	716.05785	004
5	39-43 l/h	0,8-1,0 bar	716.50814	716.05786	004
6	43-54 l/h	1,0-1,5 bar	716.50814	716.05787	004
7	54-76 l/h	1,5-2,5 bar	716.50814	716.05788	004



Tips MINITHERM MG-HA will be supplied without injector.

Small tips stretched

MICRO-TIPS M-PMYE

Size	O ₂ - Consumption	O ₂ -Pressure	Injector	Art. No.	Cat. No.
4	12-21 l/h	1,5-2,5 bar	716.50813	716.05791	004
5	18-30 l/h	2,0-4,0 bar	716.50813	716.05792	004
6	43-76 l/h	1,0-2,5 bar	716.50814	716.05793	004
7	65-98 l/h	2,0-3,5 bar	716.50814	716.05794	004



Tips MINITHERM M-PMYE will be supplied without injector.

Small tips curved

MICRO-TIPS MG-PMYE

Size	O ₂ - Consumption	O ₂ -Pressure	Injector	Art. No.	Cat. No.
4	12-21 l/h	1,5-2,5 bar	716.50813	716.05785	004
5	18-30 l/h	2,0-4,0 bar	716.50813	716.05786	004
6	43-76 l/h	1,0-2,5 bar	716.50814	716.05787	004
7	65-98 l/h	2,0-3,5 bar	716.50814	716.05788	004



Tips MINITHERM MG-PMYE will be supplied without injector.

MICRO- NEEDLE INSERTS G-H

Needle inserts stretched



Size	O ₂ - Consumption	O ₂ -Pressure	Injector	Art. No.	Cat. No.
1	9-15 l/h	0,5-1,5 bar	716.50811	716.05795	004
2	9-15 l/h	0,5-1,5 bar	716.50811	716.05796	004
3	9-21 l/h	0,5-2,0 bar	716.50811	716.05797	004
4	9-21 l/h	0,5-3,0 bar	716.50811	716.05798	004

Tips MINITHERM MG-H will be supplied without injector.

MICRO- NEEDLE INSERTS G-PMYE

Needle inserts stretched



Size	O ₂ - Consumption	O ₂ -Pressure	Injector	Art. No.	Cat. No.
2	9-15 l/h	0,5-1,5 bar	716.50811	716.05796	004
3	9-21 l/h	0,5-2,0 bar	716.50811	716.05797	004
4	9-24 l/h	0,5-3,0 bar	716.50811	716.05798	004
5	9-27 l/h	0,5-3,5 bar	716.50811	716.05799	004

Tips MINITHERM MG-PMYE will be supplied without injector.

INJECTOR

Injector for Micro-Tips



Size	Art. No. Type HA	Art. No. Type PMYE	Cat. No.
000		716.50813	004
0	716.50814	716.50814	004

INJECTOR

Injector for Micro- Needle inserts



Size	Art. No. Type HA	Art. No. Type PMYE	Cat. No.
0	716.50811	716.50811	004