



# FLEXLITE TX

Ignite your passion for welding

**Flexlite TX product series** contains welding torches to be used in TIG welding process. There are Flexlite TX models available in two value levels: K3 and K5. Each level is designed to serve specific welding needs. All Flexlite TX models enjoy the Flexlite features for user comfort, welding efficiency and extended consumable part life.



## Flexlite TX torches for TIG welding

Flexlite TX welding torches for TIG welding increase user comfort and lower welder fatigue. Silicone rubber material gives a firm grip, and the innovative design reduces wrist loading, allowing you to concentrate on challenging tasks to achieve the perfect weld.

Flexlite TX torches are available in alternative power classes and lengths, including different neck versions: fixed, flexible and S-shaped.



### **EXCELLENT ERGONOMICS**

Flexlite TX torches feature unique and innovative handle flexibility, moving the moment of load away from the welder's wrist, reducing apparent weight and lowering fatigue.



### **USABILITY MEANS EFFICIENCY**

Compact neck designs include rigid, flexible and S-shaped rotating neck designs, offering superb cooling performance and good access to challenging joint designs.



### **QUALITY IS MORE THAN MEETS THE EYE**

Kemppi consumables and accessories support both welding quality and productivity.



# Materials selection elevates usability

The Flexlite TX silicone rubber handles are shaped to the hand. They consider both right and left-handed welders and alternative holding positions. Combined with cables set flexibility and leather sheathing protection, Flexlite TX materials selection elevates usability to maximize welding comfort and practical durability.

Fixed neck, flexible neck and S-shaped rotating neck. Flexlite TX torches are designed to provide best welding ergonomics in all welding positions.





## QUALITY IS MORE THAN MEETS THE EYE!

Shielding gas flow has a significant effect on weld quality. Normally shielding gas flow is invisible, but this simulation demonstrates how torch design and consumable parts affect gas turbulence and effective shielding gas coverage.

Kemppi gas lenses include many high-quality gas diffuser mesh layers. This structure provides the best performance by improving the laminar flow compared to other conventional designs.

# Kemppi consumables support welding quality and productivity

Consumables represent only a small portion of the total costs in TIG welding, but from the quality point of view they play an important role.

Kemppi offers all consumables for your TIG welding applications. Manufactured using the best processes and materials, Kemppi consumables help you create top quality TIG welds. Kemppi consumables and accessories are designed especially to suit your Flexlite torches. To get the best quality and cost-effectiveness for your welding, equip your Flexlite torch with Kemppi consumables.



The picture on the right shows a highly turbulent flow, offering poor shielding and elevated gas consumption.

The picture on the left defines a torch fitted with a Kemppi gas lens kit, creating a smooth laminar gas flow, excellent weld pool shielding and economic gas usage.

# Welding comfort and

## KEMPPI CONSUMABLES

Manufactured using the best processes and materials, Kemppi consumables support your welding productivity and help you create top quality TIG welds.

## GOOD ACCESS

Neck designs include rigid, flexible and S-shaped rotating necks, offering superb cooling performance and good access to challenging joint designs.

## FIRM GRIP

Silicone rubber material gives a firm grip, and the innovative design reduces wrist loading, allowing you to concentrate on challenging tasks to achieve the perfect weld.

## EASY ACCESS TO INFORMATION

The QR code takes you directly to relevant ordering codes, consumables, product documents and Kemppi contacts.



# practical durability



## ● TRIGGER OPTIONS

Available with or without a trigger switch. An optional switch extension makes the trigger control more accurate when holding the torch close to the welding head.

## ● REMOTE CONTROLS

Flexlite TX torches offer alternative on-torch remote controls, which allow accurate and immediate welding current adjustment at distance. Remote controls are available for K5 level models only.

## ● SHAPED TO THE HAND

The Flexlite TX handles are shaped to the hand. They consider both right and left-handed welders and alternative holding positions.

## ● DURABILITY

The cable set flexibility and leather sheathing protection elevates usability to maximize welding comfort and practical durability.



# Flexlite TX models

## SELECT SUITABLE TORCH ACCORDING TO THE VALUE LEVEL

Kemppi's Flexlite TX welding torches are divided into two value levels: K3 and K5. The difference between them is the type of connectors in control cable and cooling water hoses as shown in the pictures below. The K3 level also includes models with DIX connector and a shielding gas valve in the torch body.



K3 level models have screw-in connectors in water hoses and a 4-pin control cable connector.



K5 level models have snap connectors in water hoses and a 7-pin control cable connector.

Welding capacity, physical size and reach are primary considerations when selecting the torch for your application. Thermal efficiency, consumables design and lifetime, are values that will improve your welding satisfaction and reduce overall costs.

Flexlite products offer a wide range of models, so you can be sure to select the capacity, size, and length, to match your application. Be it road vehicles or aerospace, Flexlite ignites your passion for welding.



TX135GF  
TX133GF



TX165GF  
TX163GF



TX165GS  
TX163GS



TX165G  
TX225G  
TX223G



TX225GS  
TX223GS



TX255WS  
TX253WS



TX305WF  
TX303WF












TX355W  
TX353W

Flexlite TX Technical data		135GF 133GF	165GF 163GF	165GS 163GS	165G	163GVD9	225G 223G	225GS 223GS	223GVD13	255WS 253WS	305WF 303WF	355W 353W
Type of cooling		Gas	Gas	Gas	Gas	Gas	Gas	Gas	Gas	Water	Water	Water
Coolant flow rate (l/min)	l/min	-	-	-	-	-	-	-	-	1	1	1
Coolant pressure (min)	MPa	-	-	-	-	-	-	-	-	0.1	0.1	0.1
Coolant pressure (max)	MPa	-	-	-	-	-	-	-	-	0.5	0.5	0.5
Arc striking voltage	kV	10	10	10	10	10	10	10	10	10	10	10
Type of connection	Current-gas	R1/4	R1/4	R1/4	R1/4	DIX 9 mm	R1/4	R1/4	DIX 13 mm	R1/4 / R1/4 & R3/8	R1/4 / R1/4 & R3/8	R1/4 / R1/4 & R3/8
	Control	7-pin / 4-pin	7-pin / 4-pin	7-pin / 4-pin	7-pin / 4-pin	-	7-pin / 4-pin	7-pin / 4-pin	-	7-pin / 4-pin	7-pin / 4-pin	7-pin / 4-pin
	Coolant	-	-	-	-	-	-	-	-	Snap connector	Snap connector	Snap connector
Electrode diameters	mm	1.0...2.4	1.0...4.0	1.0...2.4	1.0...4.0	1.0...4.0	1.0...4.0	1.0...4.0	1.0...4.0	1.0...2.4 / 1.0...4.0	1.0...2.4	1.0...4.0
Load capacity @ 40 % (Argon)	A	130	160	160	160	160	220	220	220	250	300	350
Load capacity @ 100 % (Argon)	A	-	-	-	-	-	-	-	-	200	200	250
Operating temperature range	°C	-10...+40	-10...+40	-10...+40	-10...+40	-10...+40	-10...+40	-10...+40	-10...+40	-10...+40	-10...+40	-10...+40
Storage temperature range	°C	-40...+60	-40...+60	-40...+60	-40...+60	-40...+60	-40...+60	-40...+60	-40...+60	-40...+60	-40...+60	-40...+60
Minimum cooling power at 1.0 l/min	kW	-	-	-	-	-	-	-	-	1.0 kW	1.0 kW	1.0 kW
Remote control		Optional / -	Optional / -	Optional / -	Optional / -	-	Optional / -	Optional / -	-	Optional / -	Optional / -	Optional / -
Neck type		Flexible	Flexible	Rotating	70° angle	70° angle	70° angle	Rotating	70° angle	Rotating	Flexible	70° angle
Torch head type		Small	Large	Small	Large	Large	Large	Large	Large	Small	Small	Large

These equipment comply with standard IEC 60974-7.

Flexlite TX models 163GVD9 and 223GVD13 are equipped with a DIX connector and a manual gas valve to regulate the shielding gas flow, ensuring basic TIG welding tasks are easily completed. Use with MMA power sources for scratch and TouchArc TIG ignition.

**Torch bodies compatibility table**

		TX135GF TX133GF	TX165GF TX163GF	TX165GS TX163GS	TX165G TX225G TX223G	TX225GS TX223GS	TX255WS TX253WS	TX305WF TX303WF	TX355W TX353W
SP013377		●	○	○	○	○			
SP013386		○	●	○	○	○			
SP013394 *		○	○	●	○	●			
SP801064 *		○	○	●	○	○	●	○	○
SP013404 *		○	○	○	○	●	○	○	○
SP013362		○	○	○	●	○			
SP014575 *							●	○	○
SP014126							○	●	○
SP013423							○	○	●

\* SP014575 Requires always SP801064 or SP013404  
 SP013394 Requires always SP801064 or SP013404  
 SP801064 and SP013404 cannot be used separately

● = Standard delivery    ○ = Accessory

## ACCESSORIES



Flexlite TX product range offers optional accessories for your torch to make it a perfect tool for your welding. Optimize your torch and make your TIG welding more efficient and convenient with accessories.

## Trigger switch options

Available with or without a trigger switch, Flexlite TX range also includes an optional switch extension to replace the regular switch. It makes the trigger control more accurate when holding the torch close to the welding head.



Regular switch



Switch extension



No switch

## Remote control options

Whatever your preference and machine type, Flexlite TX TIG torches offer an alternative on-torch remote control, which allows accurate and immediate welding current adjustment at a distance. Select either rocker or roller type of switch. Remote controls can be used only in K5 level Flexlite TX torches.



Torch remote control (rocker model)



Torch remote control (roller model)

## CONSUMABLES

Small torch body, standard consumables



1. Gas nozzle		mm			
No.	Ordering code	a	b	c	d
4	7990760	14.5	10	6.5	30
5	7990761*	14.5	11	8	30
6	7990762	14.5	14.5	10	30
7	7990763	14.5	14.5	11	30

2. Collet body	
∅ 1.0	7990660
∅ 1.6	7990661
∅ 2.4	7990662 *

3a. Collet	
∅ 1.0	7990635
∅ 1.6	7990636
∅ 2.4	7990637 *

3b. Reverse collet	
∅ 1.0	7990640
∅ 1.6	7990641
∅ 2.4	7990642

4. Torch body	
SP013377	
SP013386	
SP013394	
SP801064	
SP013404	
SP013362	

See suitability from torch bodies compatibility table on page 49.

5. O-ring	
SP7990790	

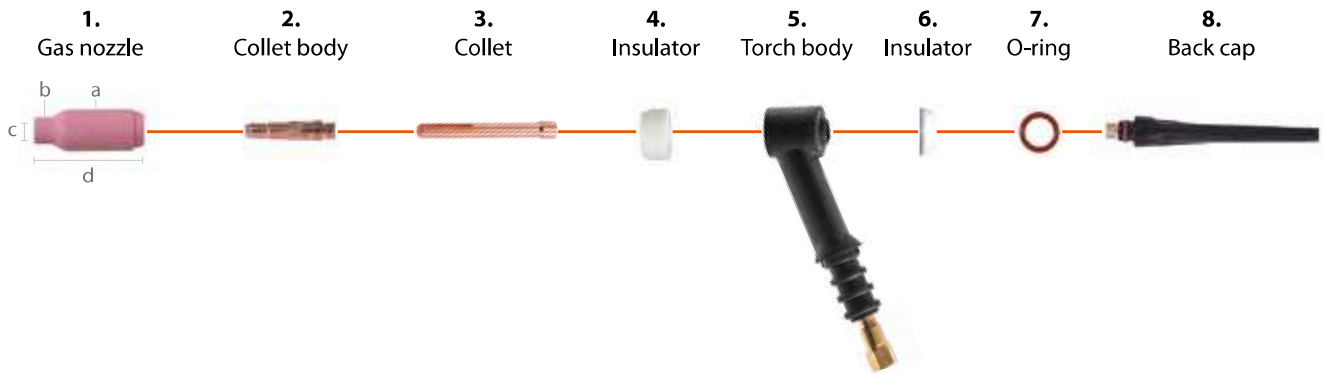
6. Back cap		Length (mm)
Small	7990730	18
Medium	7990734 *	48
Long	7990740	145

Electrode		
Grey	∅ 1.0	9873531
	∅ 1.6	9873532
	∅ 2.4	9873533 *
White	∅ 1.0	9873520
	∅ 1.6	9873521
	∅ 2.4	9873522
Length of all electrodes 175 mm		

\* Delivery equipment is for ∅ 2.4 mm electrode. Lens equipment is delivered as an accessory. The above mentioned dimensions are directive.

## CONSUMABLES

Large torch body, standard consumables



1. Gas nozzle		mm			
No.	Ordering code	a	b	c	d
4	7990766	18	11.5	6.5	47.5
5	7990770	18	12.5	8	47.5
6	7990771 *	18	14.5	9.5	47.5
7	7990772	18	16	11	47.5
8	7990773	18	18	12.5	47.5
10	7990775	21	21	16	47.5
12	7990776	24	24	19	47.5

2. Collet body	
∅ 1.6	7990681
∅ 2.4	7990682 *
∅ 3.2	7990683
∅ 4.0	7990684

3. Collet	
∅ 1.6	9876867
∅ 2.4	9876868 *
∅ 3.2	9876869
∅ 4.0	9876870

4. Insulator	
SP9580266	

6. Torch body	
SP013377	
SP013386	
SP013394	
SP013399	
SP013404	
SP013362	
SP014575	
SP014126	
SP013423	

See suitability from torch bodies compatibility table on page 49.

6. Insulator	
SP9580267	

7. O-ring	
SP7990791	

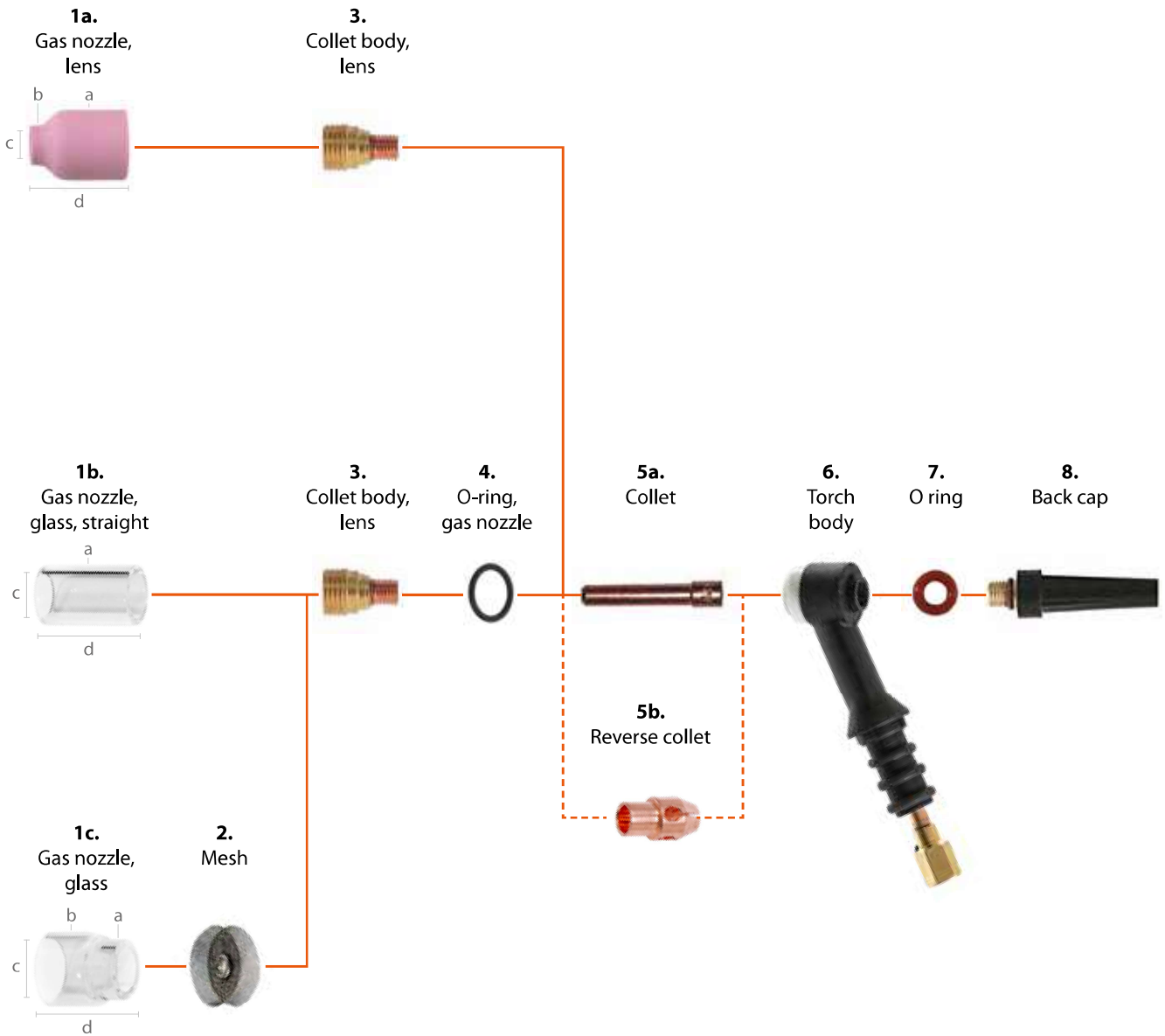
8. Back cap		Length (mm)
Small	7990731	26
Medium	7990735	58
Long	7990741 *	120

Electrode		
Grey	∅ 1.6	9873532
	∅ 2.4	9873533 *
	∅ 3.2	9873534
	∅ 4.0	9873535
White	∅ 1.6	9873521
	∅ 2.4	9873522
	∅ 3.2	9873523
Green	∅ 4.0	9873524
	∅ 4.0	9873505
Length of all electrodes 175 mm		

\* Delivery equipment is for ∅ 2.4 mm electrode. Lens equipment is delivered as an accessory. The above mentioned dimensions are directive.

## CONSUMABLES

Small torch body, lens consumables



1a. Gas nozzle, lens		mm			
No.	Ordering code	a	b	c	d
4	7990779	18.5	10.5	7	25.5
5	7990780	18.5	12	8	25.5
6	7990781	18.5	13.5	9.5	25.5
7	7990782	18.5	15	11	25.5
8	SP016562	18.5	16.5	12.5	25.5

1b. Gas nozzle, glass, straight		mm		
	Ordering code	a	c	d
Straight	SP015847	19.9	14.8	32.5

1c. Gas nozzle, glass		mm			
	Ordering code	a	b	c	d
15/20 mm	SP015848	20.2	25.3	21	28.3

2. Mesh
SP015851

3. Collet body, lens	
∅ 1.0	7990700
∅ 1.6	7990701
∅ 2.4	7990702

4. O-ring, gas nozzle, glass
SP009746

5a. Collet	
∅ 1.0	7990635
∅ 1.6	7990636
∅ 2.4	7990637

5b. Reverse collet	
∅ 1.0	7990640
∅ 1.6	7990641
∅ 2.4	7990642

6. Torch body
SP013377
SP013386
SP013394
SP801064
SP013404
SP013362

See suitability from torch bodies compatibility table on page 49.

7. O-ring
SP7990790

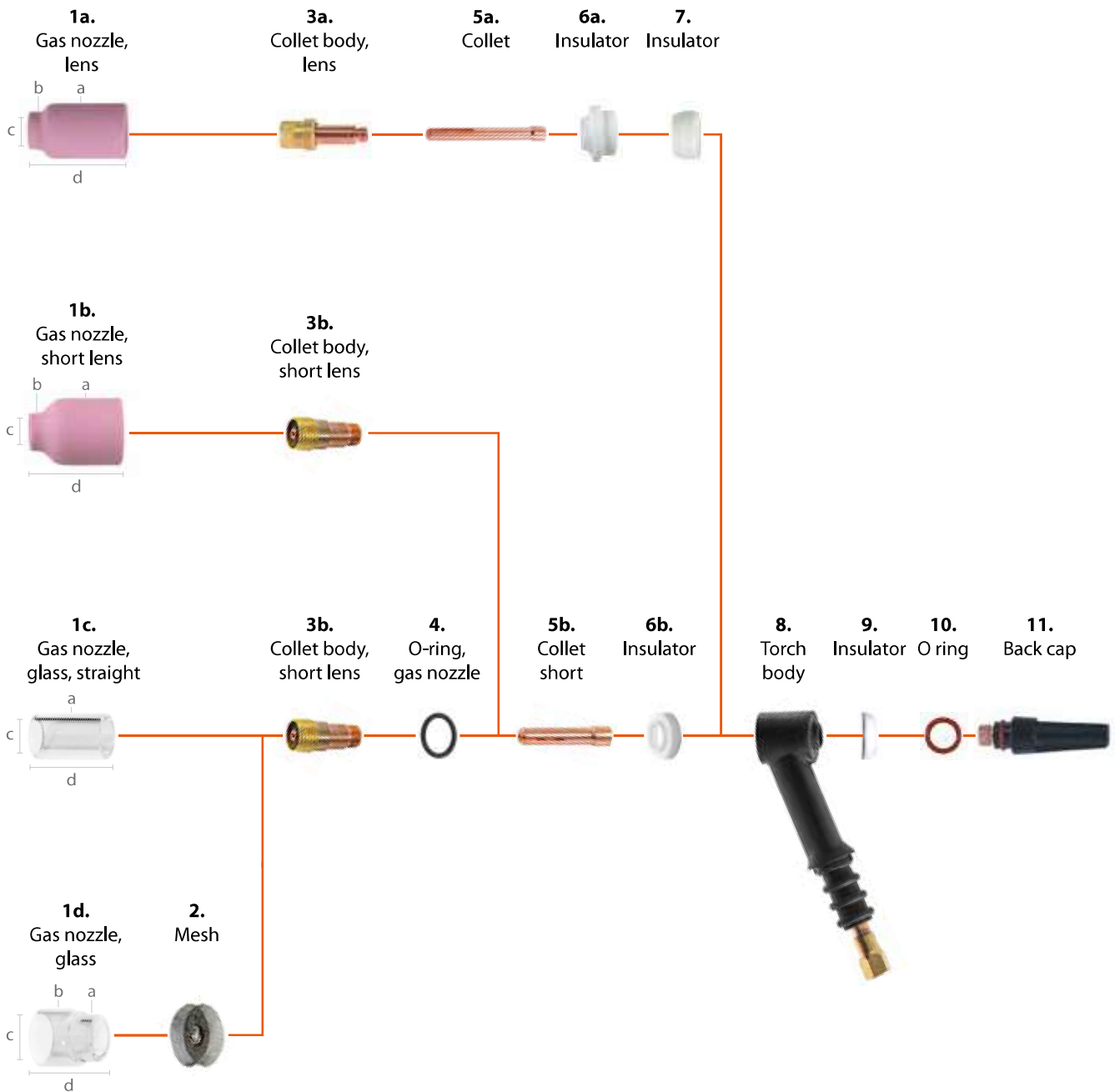
8. Back cap	Length (mm)	
Small	7990730	18
Medium	7990734	48
Long	7990740	145

Electrode		
Grey	∅ 1.0	9873531
	∅ 1.6	9873532
	∅ 2.4	9873533
White	∅ 1.0	9873520
	∅ 1.6	9873521
	∅ 2.4	9873522
Length of all electrodes 175 mm		



## CONSUMABLES

Large torch body, lens consumables



1a. Gas nozzle, lens		mm			
No.	Ordering code	a	b	c	d
5	7990783	25	12.5	7.5	42
6	7990784	25	14	9	42
7	7990785	25	15.5	11	42
8	7990786	25	16.5	12	42
11	7990787	25	22	17	42

1b. Gas nozzle, short lens		mm			
No.	Ordering code	a	b	c	d
4	7990779	18.5	10.5	7	25.5
5	7990780	18.5	12	8	25.5
6	7990781	18.5	13.5	9.5	25.5
7	7990782	18.5	15	11	25.5
8	SP016562	18.5	16.5	12.5	25.5

1c. Gas nozzle, glass		mm		
	Ordering code	a	c	d
Straight	SP015847	19.9	14.8	32.5

1d. Gas nozzle, glass		mm			
	Ordering code	a	b	c	d
15/20 mm	SP015848	20.2	25.3	21	28.3

2. Mesh
SP016690

3a. Collet body, lens	
ø 1.6	7990711
ø 2.4	7990712
ø 3.2	7990713
ø 4.0	7990714

3b. Collet body, short lens	
ø 1.6	SP015842
ø 2.4	SP015843
ø 3.2	SP015844

4. O-ring, gas nozzle, glass
SP009746

5a. Collet	
ø 1.6	9876867
ø 2.4	9876868
ø 3.2	9876869
ø 4.0	9876870

5b. Collet, short	
ø 1.6	7990655
ø 2.4	7990656
ø 3.2	7990657

6a. Insulator
9876860

6b. Insulator
SP015849

7. Insulator
SP9580266

8. Torch body
SP013377
SP013386
SP013394
SP013399
SP013404
SP013362
SP014575
SP014126
SP013423

See suitability from torch bodies compatibility table on page 49.

9. Insulator
SP9580267

10. O-ring
SP7990791

11. Back cap	Length (mm)	
Small	7990731	26
Medium	7990735	58
Long	7990741	120

Electrode		
Grey	ø 1.6	9873532
	ø 2.4	9873533
	ø 3.2	9873534
	ø 4.0	9873535
White	ø 1.6	9873521
	ø 2.4	9873522
	ø 3.2	9873523
Green	ø 4.0	9873524
	ø 4.0	9873505
Length of all electrodes 175 mm		

## CONSUMABLE KITS

Kemppi genuine PRO consumable starter kits include a complete set of consumables for your TIG welding applications. Kits provide all TIG torch accessories you need to start welding. They include multiple size nozzles, glass nozzles, lenses, collets and collet bodies ready to be used with small or large torch bodies.

The kits come complete with pre-labeled cartoon box for convenient storage and easy re-ordering. See more detailed content in the table below. PRO KIT 5/16-24 is for small torch bodies and PRO KIT 3/8-32 is for large torch bodies.

By selecting Kemppi TIG consumables you will receive the durability and performance that you need.



PRO KIT 5/16-24		
Code	Description	Amount
<b>W016085</b>	<b>PRO KIT 5/16-24, including:</b>	<b>1</b>
7990635	COLLET 1.0 S	3
7990636	COLLET 1.6 S	3
7990637	COLLET 2.4 S	3
SP9878013	INSULATOR S	2
7990730	BACK CAP SHORT S	1
7990734	BACK CAP MEDIUM S	1
7990740	BACK CAP LONG S	1
7990700	COLLET BODY LENS 1.0 S	1
7990701	COLLET BODY LENS 1.6 S	1
7990702	COLLET BODY LENS 2.4 S	1
7990779	GAS NOZZLE LENS 4 S	1
7990780	GAS NOZZLE LENS 5 S	1
7990781	GAS NOZZLE LENS 6 S	1
7990782	GAS NOZZLE LENS 7 S	1
SP015847	GAS NOZZLE GLASS STRAIGHT	2
SP015848	GAS NOZZLE GLASS 15/20MM	2
SP009746	O-RING GAS NOZZLE GLASS	4
SP015851	MESH GAS NOZZLE GLASS	2

PRO KIT 3/8-32		
Code	Description	Amount
<b>W016086</b>	<b>PRO KIT 3/8-32, including:</b>	<b>1</b>
7990780	GAS NOZZLE LENS 5 S	1
7990781	GAS NOZZLE LENS 6 S	1
7990782	GAS NOZZLE LENS 7 S	1
7990779	GAS NOZZLE LENS 4 S	1
7990655	COLLET SHORT 1.6 L	3
7990656	COLLET SHORT 2.4 L	3
7990657	COLLET SHORT 3.2 L	3
SP015842	COLLET BODY LENS SHORT 1.6 L	1
SP015843	COLLET BODY LENS SHORT 2.4 L	1
SP015844	COLLET BODY LENS SHORT 3.2 L	1
SP9580267	INSULATOR UP L	1
SP015849	INSULATOR SPECIAL L	2
7990731	BACK CAP SHORT L	1
7990735	BACK CAP MEDIUM L	1
7990741	BACK CAP LONG L	1
SP015847	GAS NOZZLE GLASS STRAIGHT	2
SP015848	GAS NOZZLE GLASS 15/20MM	2
SP009746	O-RING GAS NOZZLE GLASS	4
SP015851	MESH GAS NOZZLE GLASS	2

## ORDERING INFORMATION

FLEXLiTE TX			
Product	Ordering code		
	4 m:	8 m:	16 m:
FLEXLiTE TX 133GF	-	TX133GF8	-
FLEXLiTE TX 135GF	TX135GF4	TX135GF8	TX135GF16
FLEXLiTE TX 163GF	-	TX163GF8	-
FLEXLiTE TX 165GF	TX165GF4	TX165GF8	TX165GF16
FLEXLiTE TX 163GS	TX163GS4	TX163GS8	-
FLEXLiTE TX 165GS	TX165GS4	TX165GS8	TX165GS16
FLEXLiTE TX 165G	TX165G4	TX165G8	TX165G16
FLEXLiTE TX 223G	TX223G4	TX223G8	-
FLEXLiTE TX 225G	TX225G4	TX225G8	TX225G16
FLEXLiTE TX 223GS	-	TX223GS8	TX223GS16
FLEXLiTE TX 225GS	TX225GS4	TX225GS8	TX225GS16
FLEXLiTE TX 303WF	-	TX303WF8	-
FLEXLiTE TX 305WF	TX305WF4	TX305WF8	TX305WF16
FLEXLiTE TX 253WS	TX253WS4	TX253WS8	-
FLEXLiTE TX 255WS	TX255WS4	TX255WS8	TX255WS16
FLEXLiTE TX 353W	TX353W4	TX353W8	TX353W16
FLEXLiTE TX 355W	TX355W4	TX355W8	TX355W16
FLEXLiTE TX 135GFN	TX135GFN4	TX135GFN8	-
FLEXLiTE TX 163GVD9	TX163GVD94	-	-
FLEXLiTE TX 165GFN	TX165GFN4	TX165GFN8	-
FLEXLiTE TX 165GSN	-	TX165GSN8	-
FLEXLiTE TX 223 GVD13	TX223GVD134	-	-
FLEXLiTE TX 225GN	TX225GN4	TX225GN8	-
FLEXLiTE TX 255WSN	-	TX255WSN8	-
FLEXLiTE TX 305WFN	-	TX305WFN8	-
FLEXLiTE TX 355WN	-	TX355WN8	-

### FLEXLiTE TX remotes (optional, available for K5 models only)

Product	Ordering code	
	For water-cooled torch:	For gas-cooled torch:
FLEXLiTE TXR10 remote, roller switch	TXR10W	TXR10G
FLEXLiTE TXR20 remote, rocker switch	TXR20W	TXR20G

### FLEXLiTE TX other accessories (optional)

Product	Ordering code
FLEXLiTE TX trigger extension	SP801091
Adapter R1/4 to DIX 9mm	SP016758
Adapter R1/4 to DIX 13mm	SP016759

### The name of a Flexlite torch tells its properties and use

