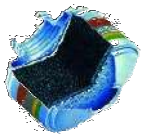
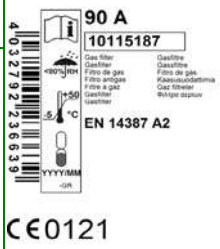
Technical Data Sheet

Description

Description	90 A	
Part Number	10115187	
Marking according to EN	A2	
Conditions of use	• organic gases and vapors with a boiling point > 65° C	
Colour code	brown	
Labels		

Characteristics

Weight [g]	210
Diameter [mm]	107
Height incl. thread [mm]	70
Connection	EN 148 - 1

Breathing Resistance

	at	EN 14387 requirements	Typical values
	30 l / min	1,40 mbar	0,50 mbar
	95 l / min	5,60 mbar	2,10 mbar

Concentration of Testing Gases

Class 1	1000 ppm [0,1 Vol.-%]
Class 2	5000 ppm [0,5 Vol.-%]

Performances

Filter type and class	Gases of reference	EN 14387 requirements	Typical values
A2	cyclohexane [C_6H_{12}]	35 min	70 min

Material

Housing	aluminium
Filtering material	unimpregnated activated carbon

Details/Special Information

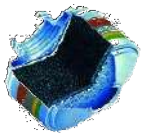
Storage conditions & time	- 5 °C to + 50°C, < 90 % r. h. 6,0 years

Technical Data Sheet

MSA The Safety Company

Description

Description	90 AB
Part Number	10098113
Marking according to EN	A2, B2
Conditions of use	• organic gases and vapors with a boiling point > 65° C • inorganic gases and vapors, e.g. chlorine, hydrogen sulfide, hydrogen cyanide
Colour code	brown grey
Labels	



Characteristics

Weight [g]	230
Diameter [mm]	107
Height incl. thread [mm]	70
Connection	EN 148 - 1

Breathing Resistance

	at	EN 14387 requirements	Typical values
	30 l / min	1,40 mbar	0,65 mbar
	95 l / min	5,60 mbar	2,95 mbar

Concentration of Testing Gases

Class 1	1000 ppm [0,1 Vol.-%]
Class 2	5000 ppm [0,5 Vol.-%]

Performances

Filter type and class	Gases of reference	EN 14387 requirements	Typical values
A2	cyclohexane [C_6H_{12}]	35 min	65 min
B2	chlorine [Cl_2]	20 min	45 min
	hydrogen sulfide [H_2S]	40 min	75 min
	hydrocyanic acid [HCN]	25 min	50 min

Material

Housing	aluminium
Filtering material	impregnated activated carbon

Details/Special Information

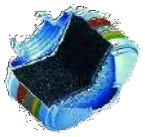
Storage conditions & time	- 5 °C to + 50°C, < 90 % r. h. 6,0 years

Technical Data Sheet

MSA The Safety Company

Description

Description	90 E
Part Number	10115349
Marking according to EN	E2
Conditions of use	• sulfur dioxide, hydrogen chloride and other acid gases
Colour code	yellow
labels	



Characteristics

Weight [g]	< 300 g
Diameter [mm]	107
Height incl. thread [mm]	70
Connection	EN 148 - 1

Breathing Resistance

	at	EN 14387 requirements	Typical values
	30 l / min	1,40 mbar	0,55 mbar
	95 l / min	5,60 mbar	2,50 mbar

Concentration of Testing Gases

Class 1	1000 ppm [0,1 Vol.-%]
Class 2	5000 ppm [0,5 Vol.-%]

Performances

Filter type and class	Gases of reference	EN 14387 requirements	Typical values
E2	sulfur dioxide [SO_2]	20 min	30 min

Material

Housing	aluminium
Filtering material	impregnated activated carbon

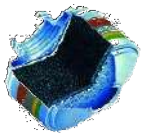
Details/Special Information

Storage conditions & time	- 5 °C to + 50°C, < 90 % r. h. 6,5 years

Technical Data Sheet

MSA The Safety Company

Description

Description	90 K	
Part Number	10115320	
Marking according to EN	K2	
Conditions of use	• ammonia and organic ammonia derivatives	
Colour code	green	
labels		

Characteristics

Weight [g]	< 300 g
Diameter [mm]	107
Height incl. thread [mm]	70
Connection	EN 148 - 1

Breathing Resistance

	at	EN 14387 requirements	Typical values
	30 l / min	1,40 mbar	0,45 mbar
	95 l / min	5,60 mbar	2,05 mbar

Concentration of Testing Gases

Class 1	1000 ppm [0,1 Vol.-%]
Class 2	5000 ppm [0,5 Vol.-%]

Performances

Filter type and class	Gases of reference	EN 14387 requirements	Typical values
K2	ammonia [NH_3]	40 min	75 min

Material

Housing	aluminium
Filtering material	impregnated activated carbon

Details/Special Information

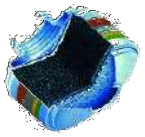
Storage conditions & time	- 5 °C to + 50°C, < 90 % r. h. 6,5 years

Technical Data Sheet

MSA The Safety Company

Description

Description	90 ABEK
Part Number	10098114
Marking according to EN	A2, B2, E2, K1
Conditions of use	• organic gases and vapors with a boiling point > 65° C • inorganic gases and vapors, e.g. chlorine, hydrogen sulfide, hydrogen cyanide • sulfur dioxide, hydrogen chloride and other acid gases • ammonia and organic ammonia derivatives



Colour code

brown
grey
yellow
green

label

Characteristics

Weight [g]	255
Diameter [mm]	107
Height incl. thread [mm]	70
Connection	EN 148 - 1

Breathing Resistance

	at	EN 14387 requirements	Typical values
	30 l / min	1,40 mbar	1,0 mbar
	95 l / min	5,60 mbar	4,20 mbar

Concentration of Testing Gases

Class 1	1000 ppm [0,1 Vol.-%]
Class 2	5000 ppm [0,5 Vol.-%]

Performances

Filter type and class	Gases of reference	EN 14387 requirements	Typical values
A2	cyclohexane [C_6H_{12}]	35 min	55 min
B2	chlorine [Cl_2]	20 min	45 min
	hydrogen sulfide [H_2S]	40 min	70 min
	hydrocyanic acid [HCN]	25 min	45 min
E2	sulfur dioxide [SO_2]	20 min	25 min
K1	ammonia [NH_3]	50 min	90 min

Material

Housing	aluminium
Filtering material	impregnated activated carbon

Details/Special Information

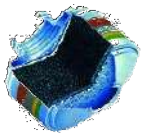
Storage conditions & time	- 5 °C to + 50°C, < 90 % r. h.	6,0 years

Technical Data Sheet

MSA The Safety Company

Description

Description	90 ABEK 2
Part Number	10098112
Marking according to EN	A2, B2, E2, K2
Conditions of use	• organic gases and vapors with a boiling point > 65° C • inorganic gases and vapors, e.g. chlorine, hydrogen sulfide, hydrogen cyanide • sulfur dioxide, hydrogen chloride and other acid gases • ammonia and organic ammonia derivatives



Colour code

brown
grey
yellow
green

labels

Characteristics

Weight [g]	290
Diameter [mm]	107
Height incl. thread [mm]	75
Connection	EN 148 - 1

Breathing Resistance

	at	EN 14387 requirements	Typical values
	30 l / min	1,40 mbar	1,20 mbar
	95 l / min	5,60 mbar	4,80 mbar

Concentration of Testing Gases

Class 1	1000 ppm [0,1 Vol.-%]
Class 2	5000 ppm [0,5 Vol.-%]

Performances

Filter type and class	Gases of reference	EN 14387 requirements	Typical values
A2	cyclohexane [C_6H_{12}]	35 min	60 min
B2	chlorine [Cl_2]	20 min	60 min
	hydrogen sulfide [H_2S]	40 min	100 min
	hydrocyanic acid [HCN]	25 min	65 min
E2	sulfur dioxide [SO_2]	20 min	35 min
K2	ammonia [NH_3]	40 min	50 min

Material

Housing	aluminium
Filtering material	impregnated activated carbon

Details/Special Information

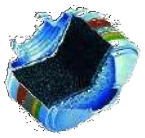
Storage conditions & time	- 5 °C to + 50°C, < 90 % r. h.	6,0 years

Technical Data Sheet

MSA The Safety Company

Description

Description	90 AX
Part Number	10108408
Marking according to EN	AX
Conditions of use	• organic gases and vapors with a boiling point > 65° C • low-boiling organic compounds [boiling point ≤ 65° C] of groups 1 and 2
Colour code	brown
labels	



Characteristics

Weight [g]	230
Diameter [mm]	107
Height incl. thread [mm]	75
Connection	EN 148 - 1

Breathing Resistance

	at	EN 14387 requirements	Typical values
	30 l / min	1,40 mbar	0,90 mbar
	95 l / min	5,60 mbar	3,80 mbar

Concentration of Testing Gases

Class 1	1000 ppm [0,1 Vol.-%]
Class 2	5000 ppm [0,5 Vol.-%]

Performances

Filter type and class	Gases of reference	EN 14387 requirements	Typical values
AX	dimethyl ether [CH_3OCH_3]	50 min [at 0,05 Vol.-%]	75 min
	isobutane [C_4H_{10}]	50 min [at 0,25 Vol.-%]	75 min

Material

Housing	aluminium
Filtering material	impregnated activated carbon

Details/Special Regulations

• Against the low boiling compounds of groups 1 and 2 gas filters AX according to EN 14387 must be used. The following maximum concentrations and usetimes apply:

low boiling compounds group	max. concentration [ml/m³]	max. usetime [min]
1	100	40
	500	20
2	1000	60
	5000	20

• For low boiling compounds of group 3 protection is provided by filters other than AX [e.g. type B or K], for low boiling compounds of group 4 gas filters provide no sufficient protection.

• AX filters may also be used as A2 filters. In this case however, they shall not be used against low boiling compounds.

• Use of AX filters against mixtures of low boiling compounds or mixtures of low boiling compounds and other organic compounds is not permitted because desorption effects max occur.

• Only factory sealed AX filters must be used. Within one work shift [max. 8 hours] repeated use is permitted, provided the maximum usetime, listed in the above table is not exceeded. Further use is not permitted.

Storage conditions & time **5°C to 50 °C < 90 % r.h..** **6,5 years**