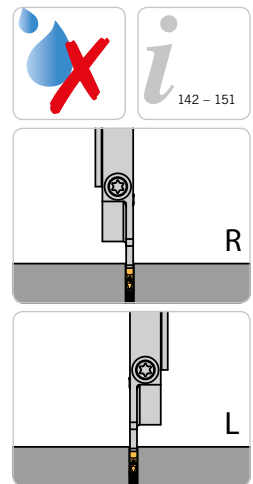
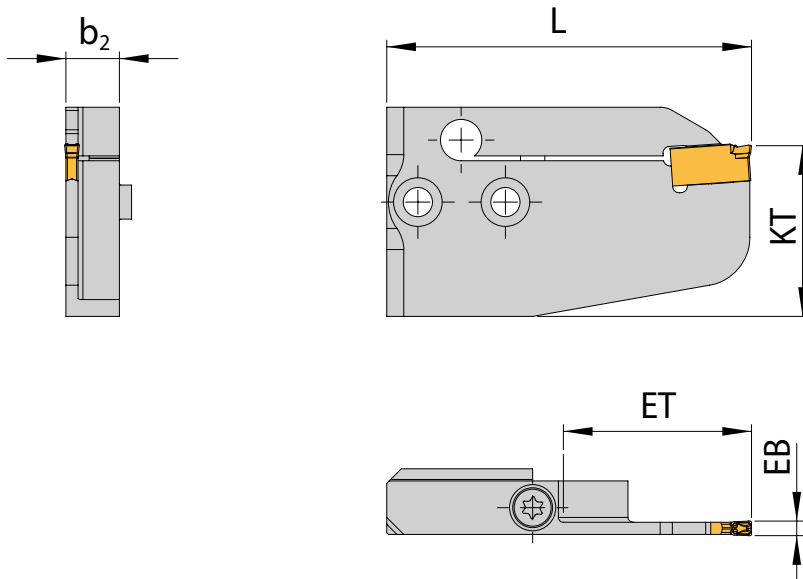


**MSA**

**Modul für einseitige Schneideinsätze** / *Module for single-sided inserts* / Modulo per inserti monolaterali



1



Linke Ausführung abgebildet  
Left-hand execution shown  
Versione sinistra in figura

**Trägerwerkzeuge** / *Holders* / Utensili

Bezeichnung Designation Articolo	EB	ET	D <sub>max</sub>	D <sub>R</sub>	b <sub>2</sub>	L	KT	PG 37	Schneideinsatz Insert Inserto
MSA-SL/R-SA1703-80	3	40,0	80	80	11	75	35	●	SA 17-30...
MSA-SL-SA1703-105	3	52,5	105	105	11	88	35	●	SA 17-30...
MSA-SL/R-SA1704-80	4	40,0	80	80	11	75	35	●	SA 17-40...
MSA-SL/R-SA1704-105	4	52,5	105	105	11	88	35	●	SA 17-40...

D<sub>max</sub> = Maximaler Durchmesser bei Vollmaterial, D<sub>R</sub> = Maximaler Stechdurchmesser bei Rohren

D<sub>max</sub> = Maximum diameter in solid, D<sub>R</sub> = Maximum diameter for tube material

D<sub>max</sub> = Diametro massimo lavorazione dal pieno, D<sub>R</sub> = Diametro massimo da tubo

Bei Modulen für Abstech- $\phi$  ab 105mm muss ein Drehmomentschlüssel verwendet werden. Anzugsmoment 3Nm.

When using part-off modules from 105mm diameter we recommend using a torque at torque setting of 3NM

Con l'utilizzo di moduli di troncatura fino a 105mm, è necessario l'utilizzo di chiave dinamometrica tratta a 3Nm

Die Module passen auf alle Grundhalter in Standardausführung, auf die eine Unterstützplatte montiert werden kann.

The modules suit all the NC-holders in the standard design where a NC-module can be located

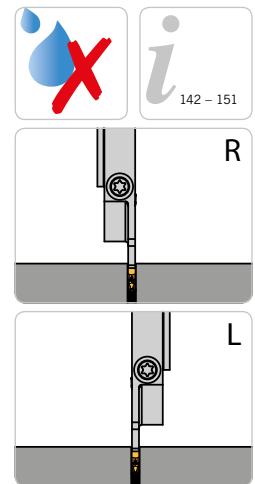
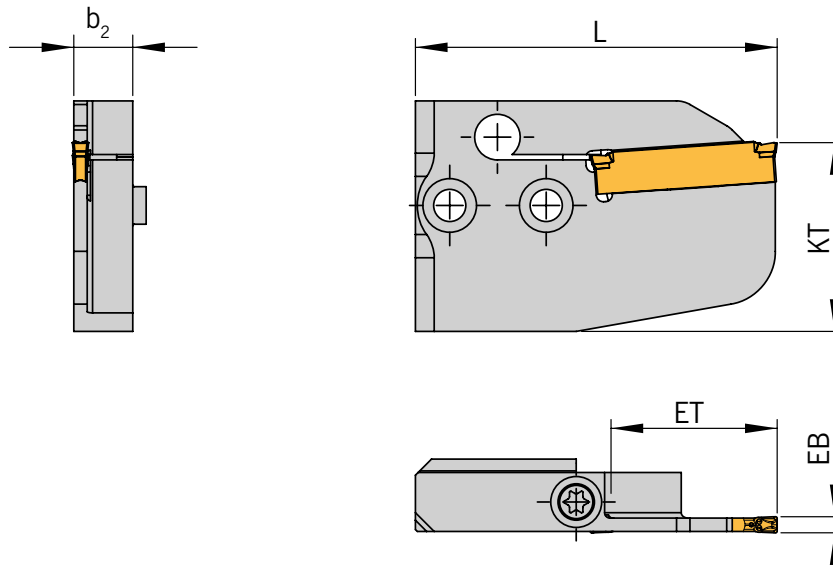
I Moduli sono associabili a tutti gli steli standard NC di scanalatura modulare ARNO.

**Ersatzteile** / *Spare Parts* / Ricambi

Trägerwerkzeug Holder Utensile	Schraube Screw Vite	Schlüssel Key Chiave
MSA-S R/L..	SA5T	T5220-IP

**MSA**

**Modul für zweiseitige Schneideinsätze / Module for double sided inserts / Modulo per inserti bilaterale**



1

Linke Ausführung abgebildet  
Left-hand execution shown  
Versione sinistra in figura

**Trägerwerkzeuge / Holders / Utensili**

Bezeichnung Designation Articolo	EB	ET	D <sub>max</sub>	D <sub>R</sub>	b <sub>2</sub>	L	KT	PG 37	Schneideinsatz Insert Inserto
MSA-SL/R-SA24015-32	1,5	16,0	32	48	11	52,0	35,0	●	SA 24-15...
MSA-SL/R-SA24015-44	1,5	22,0	44	61	11	57,0	35,0	●	SA 24-15...
MSA-SL/R-SA2402-32	2,0	16,0	32	48	11	52,0	35,0	●	SA 24-20...
MSA-SL/R-SA2402-44	2,0	22,0	44	61	11	57,0	35,0	●	SA 24-20...
MSA-SL/R-SA2403-32	3,0	16,0	32	48	11	52,0	35,0	●	SA 24-30...
MSA-SL/R-SA2403-44	3,0	22,0	44	61	11	57,0	35,0	●	SA 24-30...
MSA-SL/R-SA2404-44	4,0	22,0	44	61	11	57,0	35,0	●	SA 24-40...
MSA-SL/R-SA3502-52	2,0	26,0	52	68	11	67,5	35,0	●	SA 35-20...
MSA-SL/R-SA3502-65	2,0	32,5	65	80	11	67,5	35,0	●	SA 35-20...
MSA-SL/R-SA3502-105	2,0	52,5	105	105	11	88,0	35,0	●	SA 35-20...
MSA-SL/R-SA3503-52	3,0	26,0	52	68	11	67,5	35,0	●	SA 35-30...
MSA-SL/R-SA3503-65	3,0	32,5	65	80	11	67,5	35,0	●	SA 35-30...
MSA-SL/R-SA3503-105	3,0	52,5	105	105	11	88,0	35,0	●	SA 35-30...
MSA-SL/R-SA3503-125	3,0	62,5	125	125	11	97,5	48,5	●	SA 35-30...
MSA-SL/R-SA3503-140	3,0	70,0	140	140	11	105,5	48,5	●	SA 35-30...
MSA-SL/R-SA3504-52	4,0	26,0	52	68	11	67,5	35,0	●	SA 35-40...
MSA-SL/R-SA3504-65	4,0	32,5	65	80	11	67,5	35,0	●	SA 35-40...
MSA-SL/R-SA3504-105	4,0	52,5	105	105	11	88,0	35,0	●	SA 35-40...

D<sub>max</sub>= Maximaler Durchmesser bei Vollmaterial, D<sub>R</sub>= Maximaler Stechdurchmesser bei Rohren

D<sub>max</sub> = Maximum diameter in solid, D<sub>R</sub> = Maximum diameter for tube material

D<sub>max</sub> = Diametro massimo lavorazione dal pieno, D<sub>R</sub> = Diametro massimo da tubo

Bei Modulen für Abstech- $\phi$  ab 105mm muss ein Drehmomentschlüssel verwendet werden. Anzugsmoment 3Nm.

When using part-off modules from 105mm diameter we recommend using a torque at torque setting of 3Nm

Con l'utilizzo di moduli di troncatura fino a 105mm, è necessario l'utilizzo di chiave dinamometrica tratta a 3Nm

Die Module passen auf alle Grundhalter in Standardausführung, auf die eine Unterstützplatte montiert werden kann.

The modules suit all the NC-holders in the standard design where a NC-module can be located

I Moduli sono associabili a tutti gli steli standard NC di scanalatura modulare ARNO.

**Ersatzteile / Spare Parts / Ricambi**

Trägerwerkzeug Holder Utensile	Schraube Screw Vite	Schlüssel Key Chiave
MSA-S R/L..	SA5T	T5220-IP

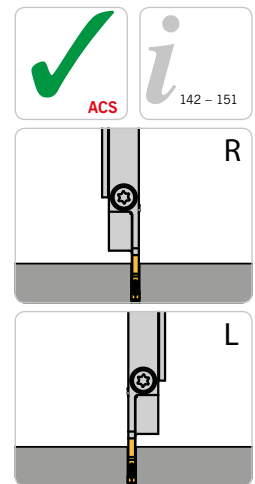
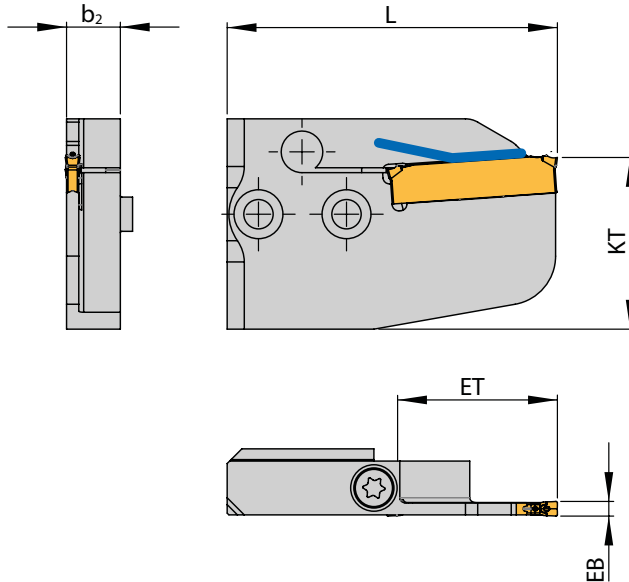
## MSA-ACS1

### Modul mit Innenkühlung – ACS1

Module with through tool coolant - ACS1

Modulo con adduzione interna - ACS1

1



Linke Ausführung abgebildet  
Left-hand execution shown  
Versione sinistra in figura



### Trägerwerkzeuge / Holders / Utensili

Bezeichnung Designation Articolo	EB	ET	D <sub>max</sub>	D <sub>R</sub>	b <sub>2</sub>	L	KT	PG 37	Schneideinsatz Insert Inserto
MSA-SL/R-SA2402-44-ACS1	2	22,0	44	61	11	57,0	35	●	SA 24-20...
MSA-SL/R-SA2403-44-ACS1	3	22,0	44	61	11	57,0	35	●	SA 24-30...
MSA-SL/R-SA3502-65-ACS1	2	32,5	65	80	11	67,5	35	●	SA 35-20...
MSA-SL/R-SA3502-90-ACS1	2	45,0	90	90	11	80,0	35	●	SA 35-20...
MSA-SL/R-SA3503-65-ACS1	3	32,5	65	80	11	67,5	35	●	SA 35-30...
MSA-SL/R-SA3503-105-ACS1	3	52,5	105	105	11	88,0	35	●	SA 35-30...
MSA-SL-SA3504-105-ACS1	4	52,5	105	105	11	88,0	35	●	SA 35-40...
MSA-SL-SA3506-65-ACS1	6	32,5	65	80	12	67,5	35	●	SA 35-60...
MSA-SL-SA3506-105-ACS1	6	52,5	105	105	12	88,0	35	●	SA 35-60...

D<sub>max</sub> = Maximaler Durchmesser bei Vollmaterial, D<sub>R</sub> = Maximaler Stechdurchmesser bei Rohren

D<sub>max</sub> = Maximum diameter in solid, D<sub>R</sub> = Maximum diameter for tube material

D<sub>max</sub> = Diametro massimo lavorazione dal pieno, D<sub>R</sub> = Diametro massimo da tubo

Bei Modulen für Abstech-ϕ ab 105mm muss ein Drehmomentschlüssel verwendet werden. Anzugsmoment 3Nm.

When using part-off modules from 105mm diameter we recommend using a torque at torque setting of 3Nm

Con l'utilizzo di moduli di troncatura fino a 105mm, è necessario l'utilizzo di chiave dinamometrica tratta a 3Nm

Hinweis: Passende Direktaufnahmen finden Sie in Kapitel 9.

Remark: Suitable flange mounted holders with VDI can be found in chapter 9.

Nota: Per combinazioni attacco VDI vedere capitolo 9.

### Ersatzteile / Spare Parts / Ricambi

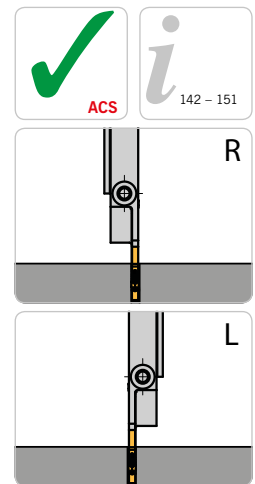
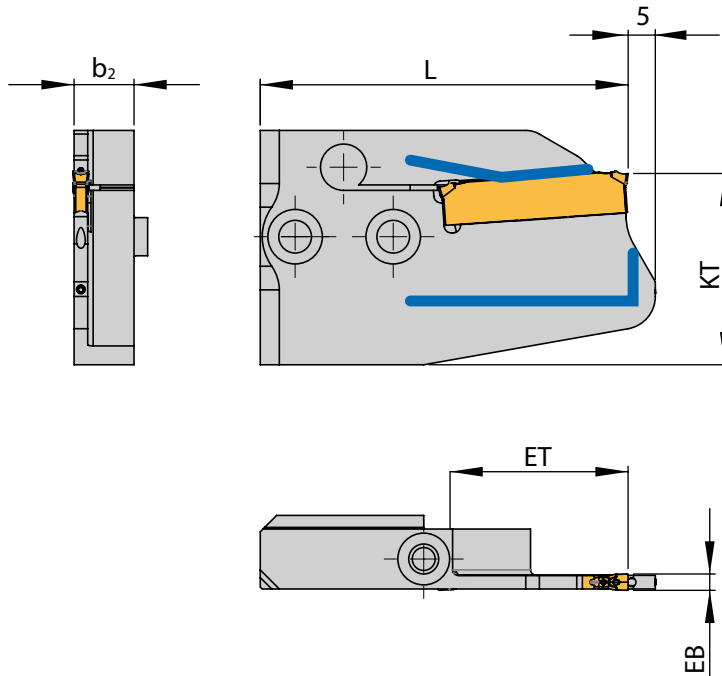
Trägerwerkzeug Holder Utensile	Schraube Screw Vite	Schlüssel Key Chiave
MSA-S R/L..	SA5T	T5220-IP

**MSA-ACS2**

**Modul mit Innenkühlung – ACS2**

Module with through tool coolant – ACS2

Modulo con adduzione interna – ACS2



1

Linke Ausführung abgebildet  
Left-hand execution shown  
Versione sinistra in figura



**Trägerwerkzeuge / Holders / Utensili**

Bezeichnung Designation Articolo	EB	ET	D <sub>max</sub>	D <sub>R</sub>	b <sub>2</sub>	L	KT	PG 37	Schneideinsatz Insert Inserto
MSA-SL/R-SA2402-32-ACS2	2	16,0	32	48	11	52,0	35	●	SA 24-20...
MSA-SL/R-SA2402-44-ACS2	2	22,0	44	61	11	57,0	35	●	SA24-20..
MSA-SL/R-SA2403-32-ACS2	3	16,0	32	48	11	52,0	35	●	SA24-30..
MSA-SL/R-SA2403-44-ACS2	3	22,0	44	61	11	57,0	35	●	SA24-30..
MSA-SL/R-SA3503-52-ACS2	3	26,0	52	68	11	67,5	35	●	SA35-30..
MSA-SL/R-SA3503-65-ACS2	3	32,5	65	80	11	67,5	35	●	SA35-30..
MSA-SL/R-SA3503-69-ACS2	3	34,5	69	80	11	69,5	35	●	SA35-30..
MSA-SL/R-SA3503-80-ACS2	3	40,0	80	80	11	75,0	35	●	SA35-30..
MSA-SL/R-SA3503-90-ACS2	3	45,0	90	90	11	80,0	35	●	SA 35-30...
MSA-SL/R-SA3503-105-ACS2	3	52,5	105	105	11	88,0	35	●	SA35-30..
MSA-SL/R-SA3504-65-ACS2	4	32,5	65	80	11	67,5	35	●	SA35-40..
MSA-SL/R-SA3504-105-ACS2	4	52,5	105	105	11	88,0	35	●	SA35-40..

D<sub>max</sub> = Maximaler Durchmesser bei Vollmaterial, D<sub>R</sub> = Maximaler Stechdurchmesser bei Rohren  
 D<sub>max</sub> = Maximum diameter in solid, D<sub>R</sub> = Maximum diameter for tube material  
 D<sub>max</sub> = Diametro massimo lavorazione dal pieno, D<sub>R</sub> = Diametro massimo da tubo  
**Bei Modulen für Abstech- $\phi$  ab 105mm muss ein Drehmomentschlüssel verwendet werden. Anzugsmoment 3Nm.**  
 When using part-off modules from 105mm diameter we recommend using a torque at torque setting of 3NM  
 Con l'utilizzo di moduli di troncatura fino a 105mm, è necessario l'utilizzo di chiave dinamometrica tratta a 3Nm

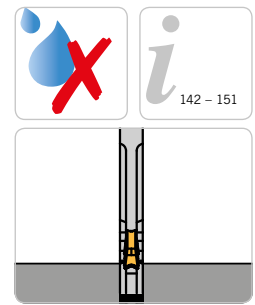
**Hinweis: Passende Direktaufnahmen finden Sie in Kapitel 9.**  
 Remark: Suitable flange mounted holders with VDI can be found in chapter 9.  
 Nota: Per combinazioni attacco VDI vedere capitolo 9.

**Ersatzteile / Spare Parts / Ricambi**

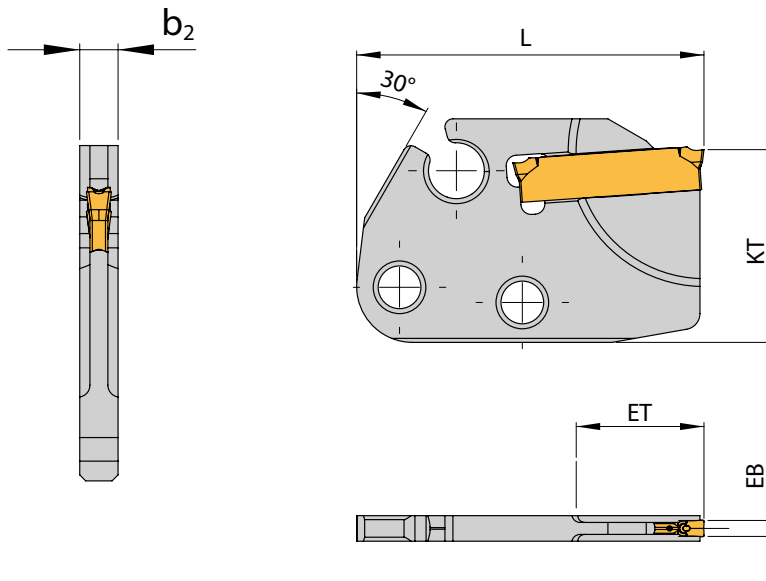
Trägerwerkzeug Holder Utensile	Schraube Screw Vite	Schlüssel Key Chiave
MSA-S R/L..	SA5T	T5220-IP

**MSA-IN**

Module in neutraler Ausführung / Modules in neutral design / Modulo neutro di taglio



1



**Trägerwerkzeuge / Holders / Utensili**

Bezeichnung Designation Articolo	EB	ET	D <sub>max</sub>	b <sub>2</sub>	L	KT	PG 37	Schneideinsatz Insert Inserto
MSA-IN-SA16015-L43,5-12	1,5	6	12	3,2	43,5	24	●	SA 16-15...
MSA-IN-SA16015-L43,5-16	1,5	8	16	3,2	43,5	24	●	SA 16-15...
MSA-IN-SA1602-20	2,0	10	20	3,2	35,5	24	●	SA 16-20...
MSA-IN-SA1602-26	2,0	13	26	3,2	35,5	24	●	SA 16-20...
MSA-IN-SA24015-20	1,5	10	20	3,2	43,5	24	●	SA 24-15...
MSA-IN-SA24015-32	1,5	16	32	3,2	43,5	24	●	SA 24-15...
MSA-IN-SA2402-20	2,0	10	20	3,2	43,5	24	●	SA 24-20...
MSA-IN-SA2402-26	2,0	13	26	3,2	43,5	24	●	SA 24-20...
MSA-IN-SA2402-32	2,0	16	32	3,2	43,5	24	●	SA 24-20...
MSA-IN-SA2402-L54-26	2,0	13	26	3,2	54,0	24	●	SA 24-20...
MSA-IN-SA2403-32	3,0	16	32	3,2	43,5	24	●	SA 24-30...
MSA-IN-SA3503-52	3,0	26	52	3,2	54,5	24	●	SA 35-30...

D<sub>max</sub> = Maximaler Durchmesser bei Vollmaterial

D<sub>max</sub> = Maximum diameter in solid

D<sub>max</sub> = Diametro massimo lavorazione dal pieno

Neutrale Module können beidseitig montiert werden.

Neutral modules can be mounted both sides.

Moduli con montaggio Neutro possono essere montati su entrambe i lati.

Module werden ohne Schrauben ausgeliefert.

Holders are not supplied with screws.

Moduli sono forniti senza viti di montaggio.

**Ersatzteile / Spare Parts / Ricambi**

Trägerwerkzeug Holder Utensile	Schraube Screw Vite	Schlüssel Key Chiave
MSA-I ..	2 x AS 0049 / 1 x AS 0050*	T5220-IP

\* Alternativ AS 0050D (doppelseitig IP20)

\* Alternative AS 0050D (Double-sided IP20)

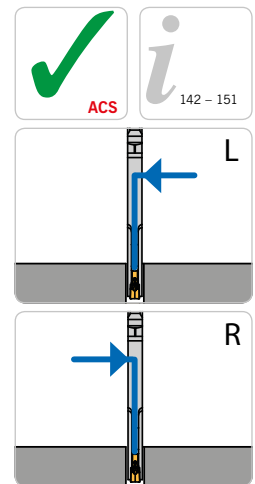
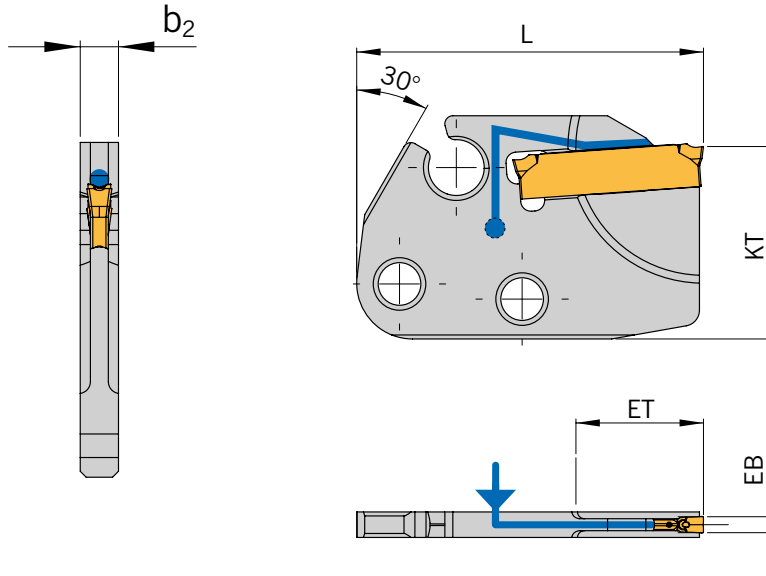
\* Alternativa AS 0050D (doppio lato IP20)

### MSA-IL/R...ACS1

#### Modul mit Innenkühlung – ACS1

Module with through tool coolant - ACS1

Modulo con adduzione interna - ACS1



1

Linke Ausführung abgebildet  
Left-hand execution shown  
Versione sinistra in figura



#### Trägerwerkzeuge / Holders / Utensili

Bezeichnung Designation Articolo	EB	ET	D <sub>max</sub>	b <sub>2</sub>	L	KT	PG 37	Schneideinsatz Insert Inserto
MSA-IL/R-SA1602-L37-20-ACS1	2	10	20	3,2	37,0	24	●	SA 16-20...
MSA-IL/R-SA1602-L41-20-ACS1	2	10	20	3,2	41,0	24	●	SA 16-20...
MSA-IL/R-SA1602-L43,5-26-ACS1	2	13	26	3,2	43,5	24	●	SA 16-20...
MSA-IL/R-SA1602-L45,5-22-ACS1	2	11	22	3,2	45,5	24	●	SA 16-20...
MSA-IL/R-SA2402-L44-46-ACS1	2	23	46	3,2	44,0	24	●	SA 24-20...
MSA-IL/R-SA2402-L45,5-32-ACS1	2	16	32	3,2	45,5	24	●	SA 24-20...
MSA-IL-SA2402-L48,5-20-ACS1 (N)	2	10	20	3,2	48,5	24	●	SA 24-20...
MSA-IL/R-SA2402-L48,5-42-ACS1	2	21	42	3,2	48,5	24	●	SA 24-20...
MSA-IL-SA2402-L56-32-ACS1 (N)	2	16	32	3,2	56,0	24	●	SA 24-20...
MSA-IL/R-SA2403-L45,5-32-ACS1	3	16	32	3,2	45,5	24	●	SA 24-30...
MSA-IL/R-SA2403-L48,5-42-ACS1	3	21	42	3,2	48,5	24	●	SA 24-30...
MSA-IL/R-SA3502-L55-52-ACS1	2	26	52	3,2	55,0	24	●	SA 35-20...
MSA-IL/R-SA3503-L55-52-ACS1	3	26	52	3,2	55,0	24	●	SA 35-30...

D<sub>max</sub> = Maximaler Durchmesser bei Vollmaterial

D<sub>max</sub> = Maximum diameter in solid

D<sub>max</sub> = Diametro massimo lavorazione dal pieno

Hinweis: Passende Direktaufnahmen Tornos / Göldenbott und Index finden Sie in Kapitel 9.

Remark: Suitable flange mounted holders Tornos / Göldenbott and Index can be found in chapter 9.

Nota: Per combinazioni attacco VDI Tornos / Göldenbott e Index vedere capitolo 9.

#### Ersatzteile / Spare Parts / Ricambi

Trägerwerkzeug Holder Utensile	Schraube Screw Vite	Schlüssel Key Chiave
MSA-I ..	2 x AS 0049 / 1 x AS 0050*	T5220-IP

\* Alternativ AS 0050D (doppelseitig IP20)

\* Alternative AS 0050D (Double-sided IP20)

\* Alternativa AS 0050D (doppio lato IP20)

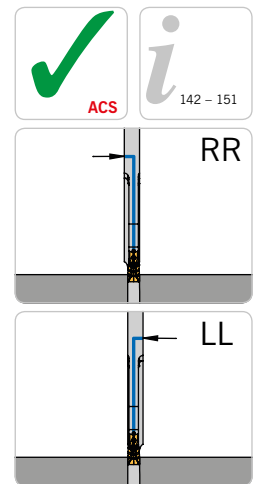
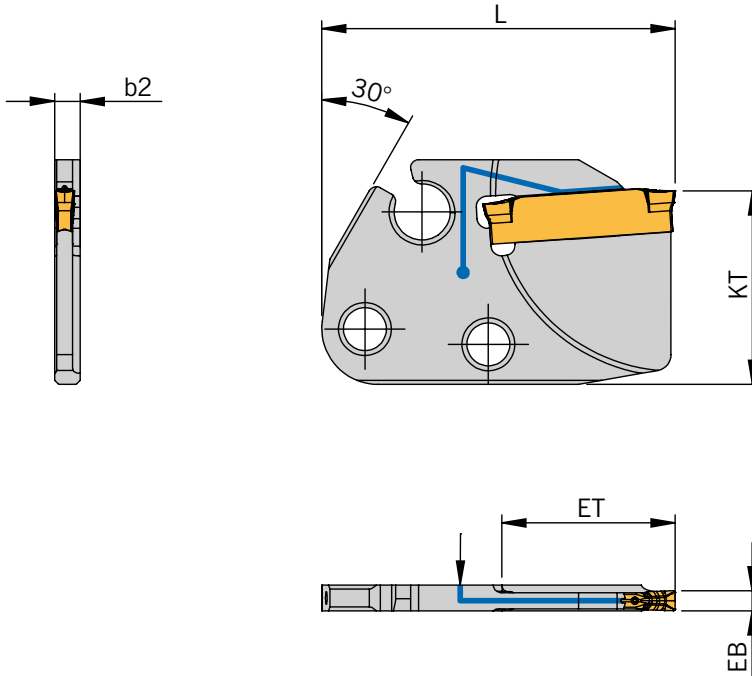
## MSA-ILL/IRR-ACS1

### Modul mit Innenkühlung – ACS1

Module with through tool coolant - ACS1

Modulo con adduzione interna - ACS1

1



Linke Ausführung abgebildet  
Left-hand execution shown  
Versione sinistra in figura

**N** NEU/NEW/  
NUOVO

### Trägerwerkzeuge / Holders / Utensili

Bezeichnung Designation Articolo	EB	ET	D <sub>max</sub>	b <sub>2</sub>	L	KT	PG 37	Schneideinsatz Insert Inserto
MSA-ILL-SA1602-L45,5-22-ACS1 <b>N</b>	2,0	11	22	3,2	45,5	24	●	SA 16-20...
MSA-ILL-SA24025-L44-44-ACS1 <b>N</b>	2,5	22	44	3,2	44,0	24	●	SA24-25...
MSA-IRR-SA24025-L44-44-ACS1 <b>N</b>	2,5	22	44	3,2	44,0	24	●	SA24-25...
MSA-ILL-SA24025-L51-46-ACS1 <b>N</b>	2,5	23	46	3,2	51,0	24	●	SA24-25...

D<sub>max</sub> = Maximaler Durchmesser bei Vollmaterial

D<sub>max</sub> = Maximum diameter in solid

D<sub>max</sub> = Diametro massimo lavorazione dal pieno

Hinweis: Passende Direktaufnahmen Tornos / Göltenbodt und Index finden Sie in Kapitel 9.

Remark: Suitable flange mounted holders Tornos / Göltenbodt and Index can be found in chapter 9.

Nota: Per combinazioni attacco VDI Tornos / Göltenbodt e Index vedere capitolo 9.

### Ersatzteile / Spare Parts / Ricambi

Trägerwerkzeug Holder Utensile	Schraube Screw Vite	Schlüssel Key Chiave
MSA-I RR/LL..	2 x AS 0049 / 1 x AS 0050*	T5220-IP

\* Alternativ AS 0050D (doppelseitig IP20)

\* Alternative AS 0050D (Double-sided IP20)

\* Alternativa AS 0050D (doppio lato IP20)