LINEA Smart Change

Smart Change è un sistema facile e innovativo, compatto nel design e veloce da utilizzare, che, grazie ad un triplo contatto, riesce a garantire una maggior rigidità e permette una miglior precisione durante la lavorazione. La modularità del sistema dà quindi la possibilità all'utilizzatore di poter usufruire di un'**ampia gamma di adattori di diversa dimensione** che possono essere presettati fuori macchina in tempo mascherato, **aumentando così la produttività e diminuendo tempi e costi di attrezzamento macchina.**

Smart Change *is an easy and innovative system, compact in design and quick to use, which, thanks to a triple contact, manages to ensure greater rigidity and allows better precision during the processing. The modularity of the system therefore gives the user the possibility to take advantage of a wide range of different size adapters that can be pre-set off the machine in masked time, thus increasing productivity and decreasing tooling times and costs machine.*

PRESETTAGGIO fuori macchina.

Outside presetting

Una volta montato l'utensile è possibile **presettare la cartuccia utilizzando l'apposito adattatore.**

Once the cutting tool is mounted, it is possible to preset the adapter in the presetter thanks to the Smart Change adapter.

Adattatori disponibili
ISO –BT 40 / 50 –
HSK 63 / 100

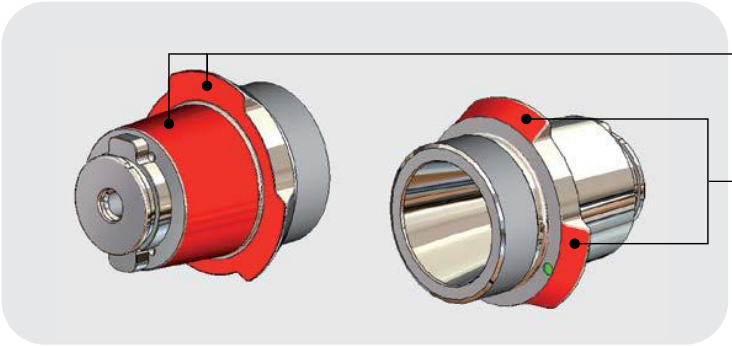
Available adapters
ISO –BT 40 / 50 –
HSK 63 / 100

Ciò permette di **ridurre i tempi e i costi** legati all'attrezzamento macchina che avverà in tempo mascherato, **aumentando notevolmente la produttività.**
This system allows to ***reduce time and costs*** *for the set up with* ***tremendous increase in the productivity.***

Perchè **3 VOLTE SMART...**

Why 3 times smart...

Il sistema **Smart Change** sfrutta ben **3 superfici di contatto** per una maggior precisione e ripetibilità.
Our Smart Change system features 3 contact surfaces as shown for a higher precision and accuracy.



Veloce — *Quick*

Sistema modulare — *Modular system*

Preset fuori macchina — *Outside presettin*

Facile — *Easy*

Totale sicurezza di utilizzo — *Safe to use*

Ultra preciso — *Ultra precise*

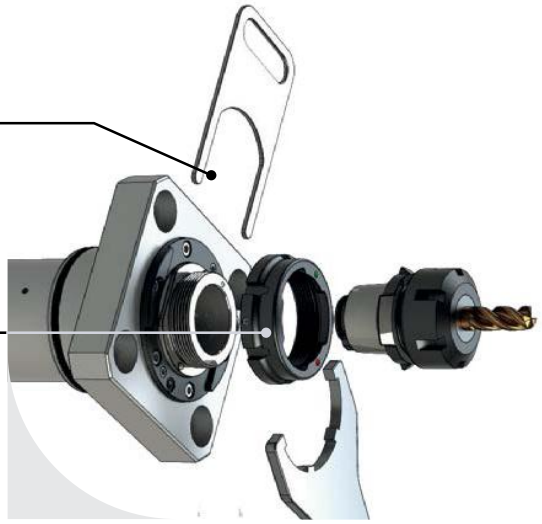
Minor costi e tempi di attrezzamento (-60%) — *Lower costs and reduced set up time (-60%)*

INCREMENTO DELLA PRODUTTIVITÀ

INCREASED PRODUCTIVITY

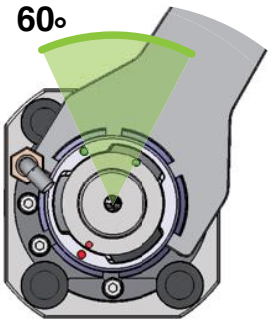
COME È FATTO
How it is made

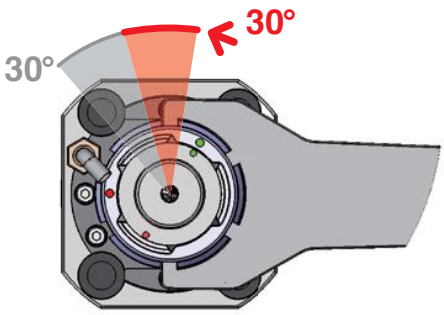
- **Chiave di riscontro SmartChange**
  (permette montaggio con una sola mano)
  SmartChange Wrench
  (one-hand handling)
- **Ghiera SmartChange brevettatta**
  (fissata al corpo principale)
  Patented SmartChange nut
  (fixed on the main body)



COME FUNZIONA
How it works

- Bloccaggio Ghiera
  Clamping nut
- Sbloccaggio
  Unclamping
- Estrazione
  Pull out

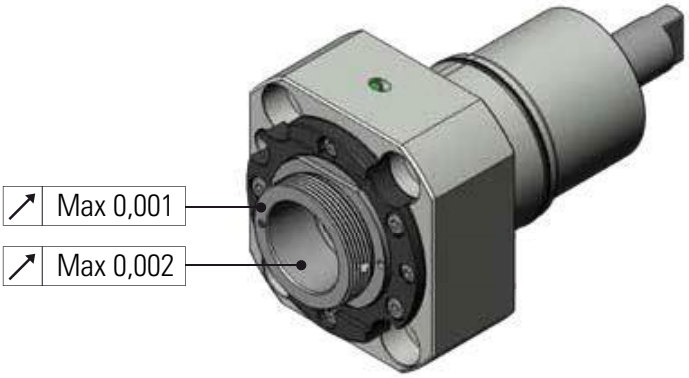


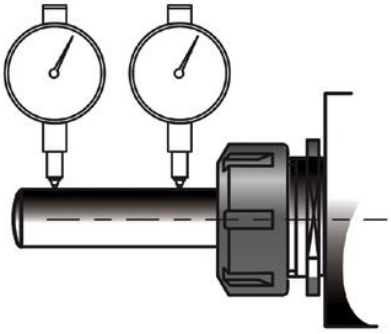


Tempo massimo di sostituzione cartucce *Time to change front end*	20”
Ripetibilità / *Repeatability*	0,003 mm

Precisione con barra inserita nel mandrino
Accuracy with gauge bar inserted in the collet chuck

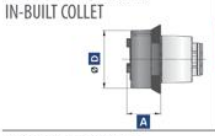
a 40mm = 0.008 mm	*at 40mm = 0.008 mm*
a 120mm = 0.01 mm	*at 120mm = 0.01 mm*





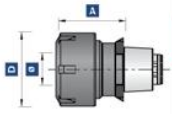
DATI TECNICI
Technical Data

PORTAPINZA INCASSATO / IN-BUILT COLLET



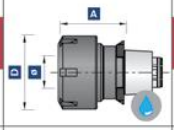
ER-20A (Ø1/13mm)			ER-25A (Ø1/16mm)		
Ø	A	D	Ø	A	D
1/13	21.5	36.8	1/16	32.4	41

PORTAPINZA / COLLET



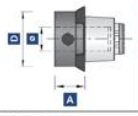
ER-20 (Ø1/13mm)			ER-25 (Ø1/17mm)			ER-32 (Ø2/22mm)		
Ø	A	D	Ø	A	D	Ø	A	D
1/13	28.5	34	1/16	30.5	42	2/20	41.5	50

PORTAPINZA / COLLET



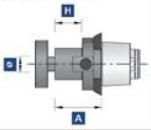
ERC20 (Ø1/13mm)			ERC25 (Ø1/16mm)			ERC32 (Ø2/20mm)		
Ø	A	D	Ø	A	D	Ø	A	D
1/13	33.5	34	1/16	35.5	42	2/20	46.5	50

WELDON



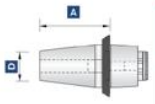
(Ø6)			(Ø5)			(Ø10)			(Ø12)			(Ø16)		
Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D
6	20	36.8	8	20	36.8	10	20	36.8	12	20	36.8	16	20	36.8

PORTAFRESA / SHELL MILL



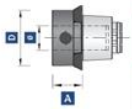
(Ø13)			(Ø16)			(Ø22)		
Ø	A	H	Ø	A	H	Ø	A	H
13	24.5	13	16	30.5	17	22	32.5	19

CALETTAMENTO / SHRINK FIT



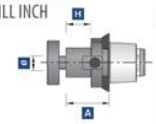
(Ø3mm)			(Ø4mm)			(Ø6mm)			(Ø8mm)			(Ø10mm)			(Ø12)			(Ø16)		
Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D
3	40	13	4	40	15	6	40	21	8	40	21	10	40	24	12	40	24	16	45	27

WELDON POLLICI / INCH



(Ø1/4")			(Ø3/8")			ER-20 (Ø1/2")			(Ø5/8")			(Ø3/4")		
Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D
1/4"	20	36,8	3/8"	20	36,8	1/2"	20	36,8	5/8"	20	36,8	3/4"	20	36,8

PORTAFRESA POLLICI / SHELL MILL INCH



(Ø3/4")			(Ø1")		
Ø	A	H	Ø	A	H
3/4"	31	17,5	1"	30,77	17,27

SEMILAVORATO/ BLANK

BLANK		
Ø	A	D
/	81	52

Accessori / *Accessories*

Adattatore preset ISO/BT
Preset adapter ISO/BT

Adattatore preset HSK
Preset adapter HSK

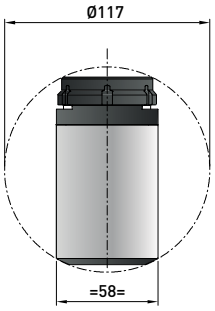
Tool boy

TOOL ID

T90cn-2.5C Neo

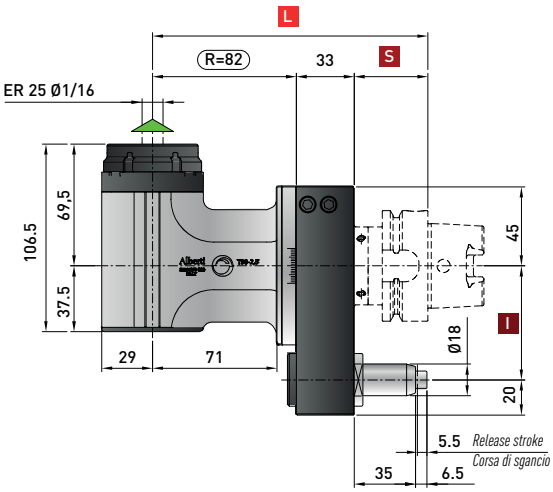
SMART CHANGE

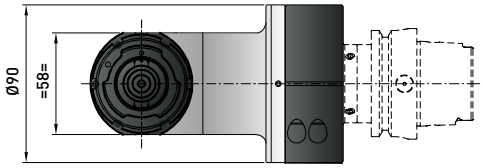
AST9025C



Minimum diameter without tool

Diametro minimo senza utensile

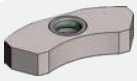




Technical data

Caratteristiche tecniche

- **Ratio** — Rapporto: 1:1
- **RPM** — Velocità: 6.000 min^{-1}
- **Max. axial load** — Max. carico assiale: 510 N
- **Torque** — Momento torcente: 50 Nm
- **Weight** — Peso: 5.4 kg
- **Tapping** — Maschiatura: Max. M12
- **Collet** — Pinza: Smart Change

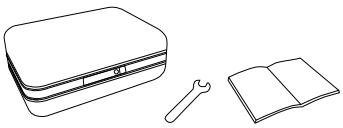


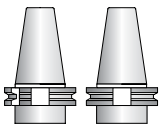
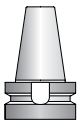
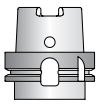
Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO

Direction of rotation same as machine spindle / *senso di rotazione uguale al mandrino*

*** STANDARD EQUIPMENT includes:**




Spindle / **Cono**	**DIN 69871-CAT**		**MAS-BT**		**HSK**		**CAPTO**	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	150	150	150	156	157	160	153	155

Dual contact spindles available / Disponibilità coni a doppio contatto

*optional

Option / **Opzione**

bar max
12

Coolant through pin
Adduzione refrigerante attraverso il perno

bar max
100

Coolant through spindle
Refrigerante attraverso il cono

T90cn-3.5 Neo

SMART CHANGE

AST9035C

Technical data
Caratteristiche tecniche

Ratio
Rapporto
1:1

RPM
Velocità
5.000 min^{-1}

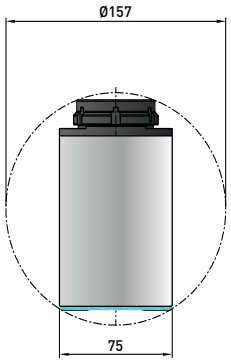
Max. axial load
Max. carico assiale
1.250 N

Torque
Momento torcente
70 Nm

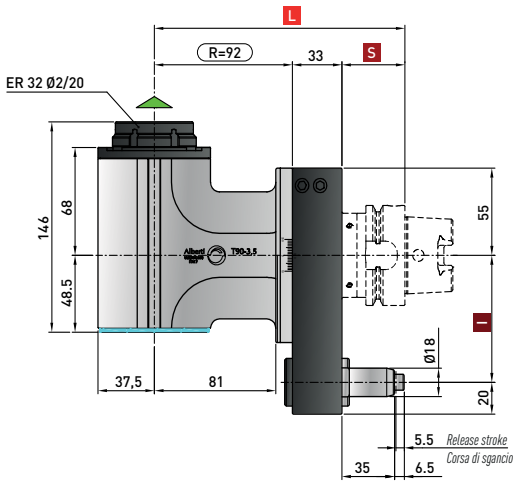
Weight
Peso
11 kg

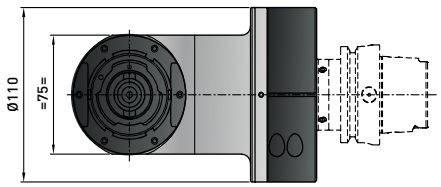
Tapping
Maschiatura
Max. M16

Collet
Pinza
Smart Change

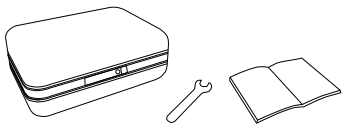


Minimum diameter without tool
Diametro minimo senza utensile

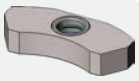




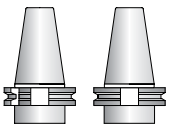
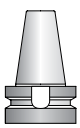
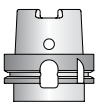
*** STANDARD EQUIPMENT includes:**



Retaining block / Tassello di ritegno / Stop-Block
NOT INCLUDED - NON INCLUSO



Direction of rotation same as machine spindle / *senso di rotazione uguale al mandrino*


Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO	
Size / Grandezza	50	50	63-80	100	C6	C8
I	80-110	80-110	80-110	80-110	80-110	80-110
S	35	41	42	45	38	40
L	160	166	167	170	163	165

Dual contact spindles available / Disponibilità coni a doppio contatto
*optional

Non interchangeable input drive shank / Coni di attacco non intercambiabili

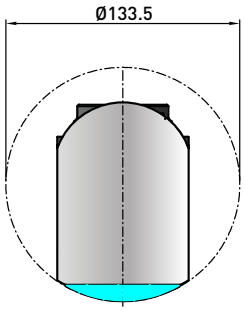
Option / **Opzione**

bar max	bar max	min $^{-1}$
12	100	9.000
Coolant through pin and spindle *Refrigerante interno attraverso utensile*	*Coolant through spindle* *Refrigerante attraverso il cono*	*High speed optional RPM max.* *Opzione alta velocità RPM max.*

THRcn-3.5 Neo IC

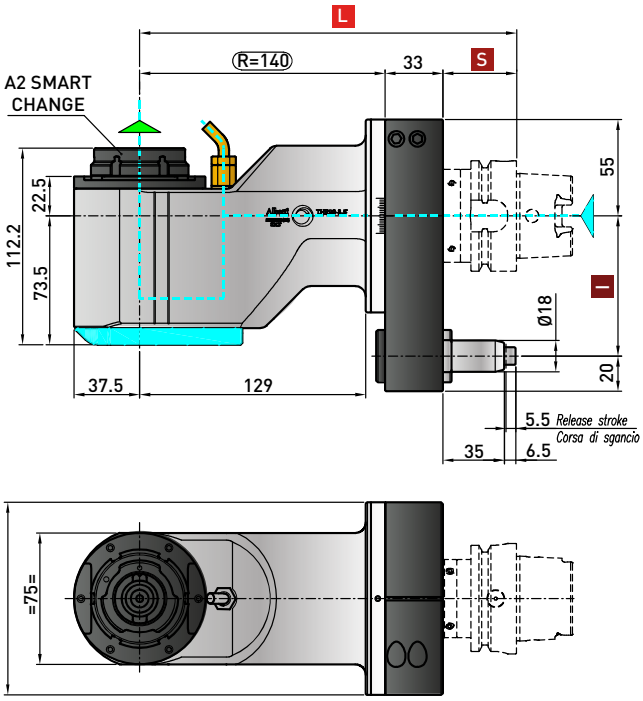
SMART CHANGE

ASTHR935C.IC



Minimum diameter without tool

Diametro minimo senza utensile



Technical data

Caratteristiche tecniche

Ratio
Rapporto
1:1

RPM | **DRY**
Velocità | Running
8.000 min^{-1} | 5.000 min^{-1}

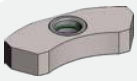
Max. axial load
Max. carico assiale
1250 N

Torque
Momento torcente
70 Nm

Weight
Peso
11.5 kg

Tapping
Maschiatura
Max. M16

Collet
Pinza
Smart Change



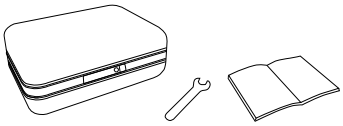
Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO

Direction of rotation same as machine spindle / *senso di rotazione uguale al mandrino*

Input coolant max. 1450 PSI / *ingresso refrigerante max. 100 bar*
Dry rotation is possible / *rotazione a secco possibile*

*** STANDARD EQUIPMENT includes:**



Spindle / **Cono**	**DIN 69871-CAT**		**MAS-BT**	**HSK**		**CAPTO**	
Size / Grandezza	50		50	63-80	100	C6	C8
I	80-110		80-110	80-110	80-110	80-110	80-110
S	35		41	42	45	38	40
L	208		214	215	218	211	213

Dual contact spindles available / Disponibilità coni a doppio contatto

*optional

Option / **Opzione**

bar max
12

Coolant through pin
Adduzione refrigerante attraverso il perno

bar max
100

Coolant through spindle
Refrigerante attraverso il cono

TCUcn-3.5 Neo

SMART CHANGE

ASTCU35C

Technical data
Caratteristiche tecniche

Ratio
Rapporto
1:1

RPM
Velocità
4.000 min^{-1}

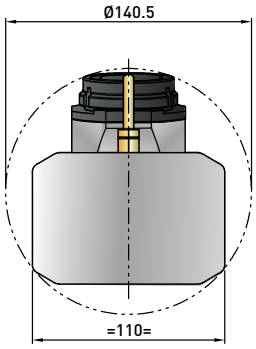
Max. axial load
Max. carico assiale
700 N

Torque
Momento torcente
50 Nm

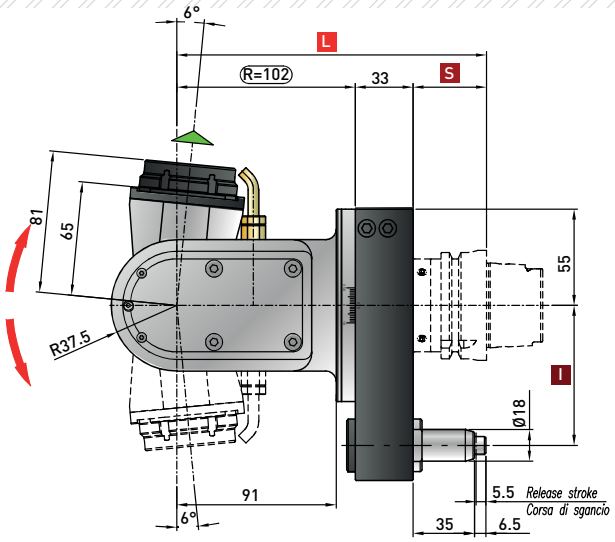
Weight
Peso
13 kg

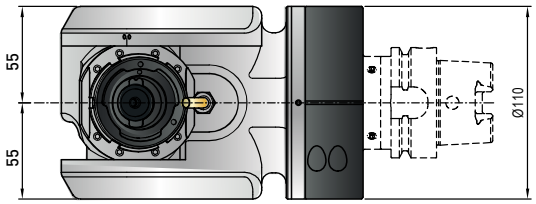
Tapping
Maschiatura
Max. M16

Collet
Pinza
Smart Change

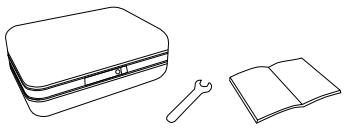


Minimum diameter without tool
Diametro minimo senza utensile

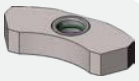




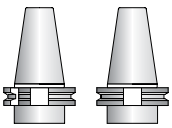
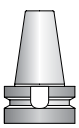
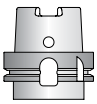
*** STANDARD EQUIPMENT includes:**



Retaining block / Tassello di ritegno / Stop-Block
NOT INCLUDED - NON INCLUSO



Direction of rotation opposite as machine spindle / *senso di rotazione contrario al mandrino*


Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO	
Size / Grandezza	50	50	63-80	100	C6	C8
I	80-110	80-110	80-110	80-110	80-110	80-110
S	35	41	42	45	38	40
L	170	176	177	180	173	175

Dual contact spindles available / Disponibilità coni a doppio contatto
*optional

Non interchangeable input drive shank / Coni di attacco non intercambiabili

Option / **Opzione**

bar max	bar max		every
12	**100**	**+/- 95°**	**5°**
Coolant through pin *Refrigerante attraverso il perno*	*Coolant through spindle* *Adduzione refrigerante interna*	*Angle* *Angolo*	*Fixed positioning* *Posizionamento fisso*