

12.2

- Pinze DELTA
Collets DELTA

12.4

- Pinze EOC
Collets EOC

12.6

- Pinze ER
Collets ER

12.8

- Pinze ER
Collets ER

12.13

- Ghiere per pinze
Collet locking caps

12.18

- Bussole portamaschio
Quick change tap holder bushes

12.19

- Bussole portamaschio
Quick change tap holder bushes

12.21

- Bussole portamaschio
Quick change tap holder bushes

12.22

- Bussole porta filiere
Quick change

12.23

- Bussole portamaschio weldon
Weldon tap holder bushes

12.24

- Anelli di trascinamento
Front catch rings

12.25

- Vite rondella bloccaggio frese
Screw and washer

12.26

- Tasselli di trascinamento
Tappets

12.27

- Tasselli di trascinamento
Tappets

12.28

- Bussole e anelli distanziali
Bushes and rings sheared

12.29

- Bussole e anelli distanziali
Bushes and rings sheared

12.30

- Bussole e anelli distanziali
Bushes and rings sheared

12.31

- Dadi e ghiera di estrazione
Treaded capnuts

12.31

- Dadi e ghiera di estrazione
Treaded capnuts

12.32

- Anelli di trascinamento
Front catch rings

12.33

- Ghiera di estrazione
Treaded capnuts

12.34

- Bussole di riduzione
Reduction bushes

12.35

- Bussole di riduzione
Reduction bushes

12.36

- Bussole di riduzione
Reduction bushes

12.37

- Bussole di riduzione
Reduction bushes

12.38

- Bussole di riduzione
Reduction bushes

12.38

- Bussole di riduzione
Reduction bushes

12.41

- Bussole di riduzione
Reduction bushes

12.42

- Adduttore refrigerante per HSK
Coolant pipe for HSK

12.42

- chiavi per tubetto HSK
Key for coolant pipe for HSK

12.43

- Spina di controllo mandr. idraulici
Test sheft for hydraulic chucks

12.43

- Codoli per riduzioni art.250
Locking shanks for art.250



ACCESSORI
Accessories

12

 **delta**

Pinze per frese a gambo cilindrico per mandrini portapinze "Delta"

Collets for "Delta" collet chucks

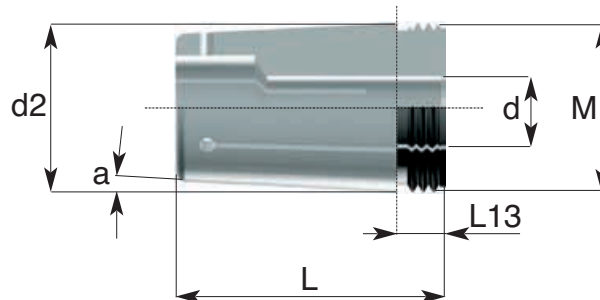
Spannzangen für Spannzangenhalter "Delta"

Pinces de serrage pour mandrins porte-pinces "Delta"

ACCESSORI PER MACCHINE UTENSILI

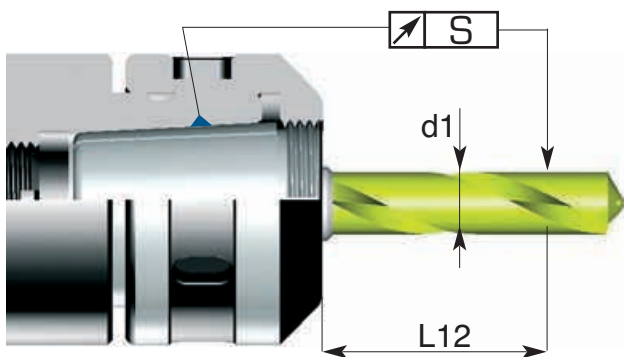


ART:209



Riferimento Item	d1 min	d1 max	capacità Capacity	d2	M	a	L	L13
209.10	3	18	nominale	26	M26X2 Sx	2°51'44"	46	8
209.20	3	22	nominale	32	M32X2 Sx	2°51'44"	51	9
209.30	4	32	nominale	44	M44X2 Sx	2°51'44"	61	11

**PRECISIONE DI ROTAZIONE
RUNOUT CONCENTRICITY**



d1 min	d1 max	L12	Concentricità max "S"
3	7	16	0.015
7	10	25	0.015
10	18	40	0.02
18	24	50	0.02
24	32	60	0.02

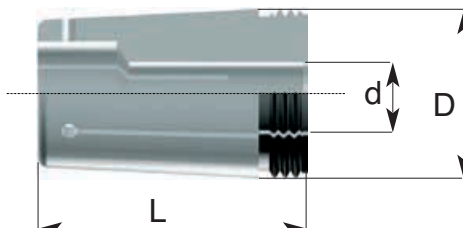
CARATTERISTICHE TECNICHE

- Costruiti in acciaio 60 SiCr7
- Temprate • Rinvenute • HRC 46±2
- Rettificati di precisione esternamente ed
- Controllati con strumenti di misura certificati

STANDARD FEATURES

- Manufactured with Silicon Chrome steel similar to SAE 9262
- Quenched • tempered • RC 46±2
- Precision ground on shanks and inside tapers
- Tested with high precision inspection and gaging equipment

ACCESSORI PER MACCHINE UTENSILI
Pinze per frese a gambo cilindrico per mandrini portapinze "Delta"
Collets for "Delta" collet chucks
Spannzangen für Spannzangenhalter "Delta"
Pinces de serrage pour mandrins porte-pinces "Delta"

ART:209
Per Art: 200 , 202 , 205 , 001.605 , BT 605

12.
3

Codice di ord Code	d H6	D	L	Cap. Pinza "d" Capacity range "d"
209.10.0030	3	26	46	nominale
209.10.0040	4	26	46	nominale
209.10.0050	5	26	46	nominale
209.10.0060	6	26	46	nominale
209.10.0070	7	26	46	nominale
209.10.0080	8	26	46	nominale
209.10.0090	9	26	46	nominale
209.10.0100	10	26	46	nominale
209.10.0110	11	26	46	nominale
209.10.0120	12	26	46	nominale
209.10.0130	13	26	46	nominale
209.10.0140	14	26	46	nominale
209.10.0150	15	26	46	nominale
209.10.0160	16	26	46	nominale
209.10.0180	18	26	46	nominale
209.20.0030	3	32	51	nominale
209.20.0040	4	32	51	nominale
209.20.0050	5	32	51	nominale
209.20.0060	6	32	51	nominale
209.20.0070	7	32	51	nominale
209.20.0080	8	32	51	nominale
209.20.0090	9	32	51	nominale
209.20.0100	10	32	51	nominale
209.20.0110	11	32	51	nominale
209.20.0120	12	32	51	nominale
209.20.0130	13	32	51	nominale
209.20.0140	14	32	51	nominale
209.20.0150	15	32	51	nominale
209.20.0160	16	32	51	nominale
209.20.0170	17	32	51	nominale
209.20.0180	18	32	51	nominale
209.20.0190	19	32	51	nominale
209.20.0200	20	32	51	nominale
209.20.0220	22	32	51	nominale

Codice di ord Code	d H6	D	L	Cap. Pinza "d" Capacity range "d"
209.30.0040	4	44	61	nominale
209.30.0050	5	44	61	nominale
209.30.0060	6	44	61	nominale
209.30.0070	7	44	61	nominale
209.30.0080	8	44	61	nominale
209.30.0090	9	44	61	nominale
209.30.0100	10	44	61	nominale
209.30.0110	11	44	61	nominale
209.30.0120	12	44	61	nominale
209.30.0130	13	44	61	nominale
209.30.0140	14	44	61	nominale
209.30.0150	15	44	61	nominale
209.30.0160	16	44	61	nominale
209.30.0170	17	44	61	nominale
209.30.0180	18	44	61	nominale
209.30.0190	19	44	61	nominale
209.30.0200	20	44	61	nominale
209.30.0210	21	44	61	nominale
209.30.0220	22	44	61	nominale
209.30.0230	23	44	61	nominale
209.30.0240	24	44	61	nominale
209.30.0250	25	44	61	nominale
209.30.0260	26	44	61	nominale
209.30.0270	27	44	61	nominale
209.30.0280	28	44	61	nominale
209.30.0290	29	44	61	nominale
209.30.0300	30	44	61	nominale
209.30.0320	32	44	61	nominale

12. ACCESSORI ACCESSORIES



Pinze EOC DIN 6388/B

Collets EOC DIN 6388/B

Spannzangen EOC DIN 6388/B

Pinces de serrage EOC DIN 6388/B

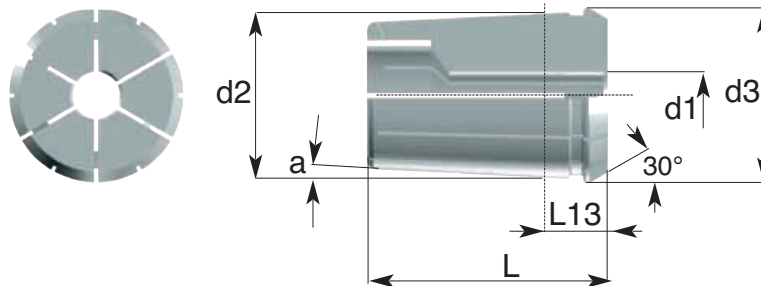
ACCESSORI PER MACCHINE UTENSILI



DIN 6388/B

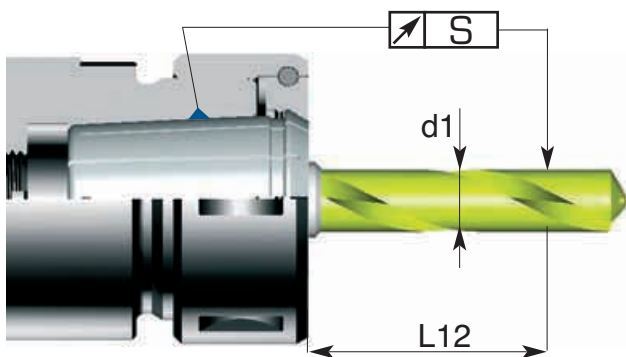
ART: 602

12.
4



Riferimento Item	d1 min	d1 max	capacità Capacity	d2	d3	a	L	L13
EOC 25	2	25	nominale	32.9	35.05	2°51'44"	52	12
EOC 32	4	32	nominale	41.3	43.7	2°51'44"	60	13

PRECISIONE DI ROTAZIONE RUNOUT CONCENTRICITY



d1 min	d1 max	L12	Concentricità max "S" Classe 2
1.6	3	10	0.015
3	6	16	0.015
6	10	25	0.015
10	18	40	0.02
18	24	50	0.02
24	30	60	0.02
30	50	80	0.03

CARATTERISTICHE TECNICHE

- Costruiti in acciaio 60 SiCr7
- Temprate • Rinvenute • HRC 46±2
- Rettificati di precisione esternamente ed
- Controllati con strumenti di misura certificati
- La tolleranza di rotazione delle pinze EOC corrisponde ai valori della classe 2 - DIN 6388

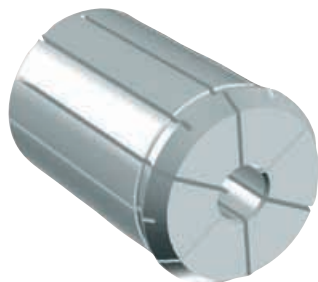
STANDARD FEATURES

- Manufactured with Silicon Chrome steel similar to SAE 9262
- Quenched • tempered • RC 46±2
- Precision ground on shanks and inside tapers
- Tested with high precision inspection and gaging equipment
- The runout accuracy of EOC collets is equivalent to DIN 6388-Class 2

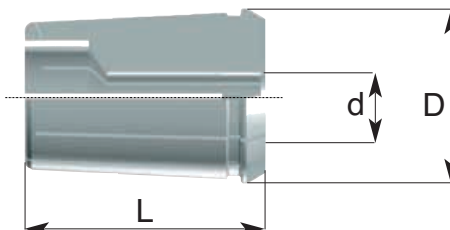
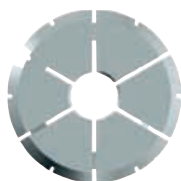
ACCESSORI PER MACCHINE UTENSILI

Pinze EOC DIN 6388/B
 Collets EOC DIN 6388/B
 Spannzangen EOC DIN 6388/B
 Pincas de serrage EOC DIN 6388/B

DIN 6388/B



ART: 602



12.
5

Codice di ord Code	EOC	d	DXL	Cap. Pinza "d" Capacity range "d"
602.25.0040	25	4,0	35,05 X 52	nominale
602.25.0045	25	4,5	35,05 X 52	nominale
602.25.0050	25	5,0	35,05 X 52	nominale
602.25.0055	25	5,5	35,05 X 52	nominale
602.25.0060	25	6,0	35,05 X 52	nominale
602.25.0065	25	6,5	35,05 X 52	nominale
602.25.0070	25	7,0	35,05 X 52	nominale
602.25.0075	25	7,5	35,05 X 52	nominale
602.25.0080	25	8,0	35,05 X 52	nominale
602.25.0085	25	8,5	35,05 X 52	nominale
602.25.0090	25	9,0	35,05 X 52	nominale
602.25.0095	25	9,5	35,05 X 52	nominale
602.25.0100	25	10,0	35,05 X 52	nominale
602.25.0105	25	10,5	35,05 X 52	nominale
602.25.0110	25	11,0	35,05 X 52	nominale
602.25.0115	25	11,5	35,05 X 52	nominale
602.25.0120	25	12,0	35,05 X 52	nominale
602.25.0125	25	12,5	35,05 X 52	nominale
602.25.0130	25	13,0	35,05 X 52	nominale
602.25.0135	25	13,5	35,05 X 52	nominale
602.25.0140	25	14,0	35,05 X 52	nominale
602.25.0145	25	14,5	35,05 X 52	nominale
602.25.0150	25	15,0	35,05 X 52	nominale
602.25.0155	25	15,5	35,05 X 52	nominale
602.25.0160	25	16,0	35,05 X 52	nominale
602.25.0165	25	16,5	35,05 X 52	nominale
602.25.0170	25	17,0	35,05 X 52	nominale
602.25.0175	25	17,5	35,05 X 52	nominale
602.25.0180	25	18,0	35,05 X 52	nominale
602.25.0185	25	18,5	35,05 X 52	nominale
602.25.0190	25	19,0	35,05 X 52	nominale
602.25.0195	25	19,5	35,05 X 52	nominale
602.25.0200	25	20,0	35,05 X 52	nominale
602.25.0205	25	20,5	35,05 X 52	nominale
602.25.0210	25	21,0	35,05 X 52	nominale
602.25.0215	25	21,5	35,05 X 52	nominale
602.25.0220	25	22,0	35,05 X 52	nominale
602.25.0225	25	22,5	35,05 X 52	nominale
602.25.0230	25	23,0	35,05 X 52	nominale
602.25.0235	25	23,5	35,05 X 52	nominale
602.25.0240	25	24,0	35,05 X 52	nominale
602.25.0245	25	24,5	35,05 X 52	nominale
602.25.0250	25	25,0	35,05 X 52	nominale
602.32.0060	32	6,0	43,70 X 60	nominale
602.32.0065	32	6,5	43,70 X 60	nominale
602.32.0070	32	7,0	43,70 X 60	nominale
602.32.0075	32	7,5	43,70 X 60	nominale
602.32.0080	32	8,0	43,70 X 60	nominale

Codice di ord Code	EOC	d	DXL	Cap. Pinza "d" Capacity range "d"
602.32.0085	32	8,5	43,70 X 60	nominale
602.32.0090	32	9,0	43,70 X 60	nominale
602.32.0095	32	9,5	43,70 X 60	nominale
602.32.0100	32	10,0	43,70 X 60	nominale
602.32.0105	32	10,5	43,70 X 60	nominale
602.32.0110	32	11,0	43,70 X 60	nominale
602.32.0115	32	11,5	43,70 X 60	nominale
602.32.0120	32	12,0	43,70 X 60	nominale
602.32.0125	32	12,5	43,70 X 60	nominale
602.32.0130	32	13,0	43,70 X 60	nominale
602.32.0135	32	13,5	43,70 X 60	nominale
602.32.0140	32	14,0	43,70 X 60	nominale
602.32.0145	32	14,5	43,70 X 60	nominale
602.32.0150	32	15,0	43,70 X 60	nominale
602.32.0155	32	15,5	43,70 X 60	nominale
602.32.0160	32	16,0	43,70 X 60	nominale
602.32.0165	32	16,5	43,70 X 60	nominale
602.32.0170	32	17,0	43,70 X 60	nominale
602.32.0175	32	17,5	43,70 X 60	nominale
602.32.0180	32	18,0	43,70 X 60	nominale
602.32.0185	32	18,5	43,70 X 60	nominale
602.32.0190	32	19,0	43,70 X 60	nominale
602.32.0195	32	19,5	43,70 X 60	nominale
602.32.0200	32	20,0	43,70 X 60	nominale
602.32.0205	32	20,5	43,70 X 60	nominale
602.32.0210	32	21,0	43,70 X 60	nominale
602.32.0215	32	21,5	43,70 X 60	nominale
602.32.0220	32	22,0	43,70 X 60	nominale
602.32.0225	32	22,5	43,70 X 60	nominale
602.32.0230	32	23,0	43,70 X 60	nominale
602.32.0235	32	23,5	43,70 X 60	nominale
602.32.0240	32	24,0	43,70 X 60	nominale
602.32.0245	32	24,5	43,70 X 60	nominale
602.32.0250	32	25,0	43,70 X 60	nominale
602.32.0255	32	25,5	43,70 X 60	nominale
602.32.0260	32	26,0	43,70 X 60	nominale
602.32.0265	32	26,5	43,70 X 60	nominale
602.32.0270	32	27,0	43,70 X 60	nominale
602.32.0275	32	27,5	43,70 X 60	nominale
602.32.0280	32	28,0	43,70 X 60	nominale
602.32.0285	32	28,5	43,70 X 60	nominale
602.32.0290	32	29,0	43,70 X 60	nominale
602.32.0295	32	29,5	43,70 X 60	nominale
602.32.0300	32	30,0	43,70 X 60	nominale
602.32.0305	32	30,5	43,70 X 60	nominale
602.32.0310	32	31,0	43,70 X 60	nominale
602.32.0315	32	31,5	43,70 X 60	nominale
602.32.0320	32	32,0	43,70 X 60	nominale

12. ACCESSORI

ACCESSORIES



Pinze ER DIN 6499/B

ER Collets DIN 6499/B

Spannzangen ER DIN 6499/B

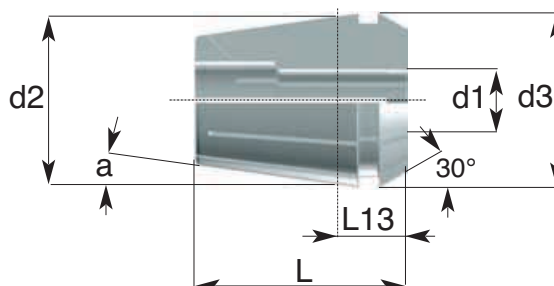
Pinces de serrage ER DIN 6499/B

ACCESSORI PER MACCHINE UTENSILI

DIN 6499/B

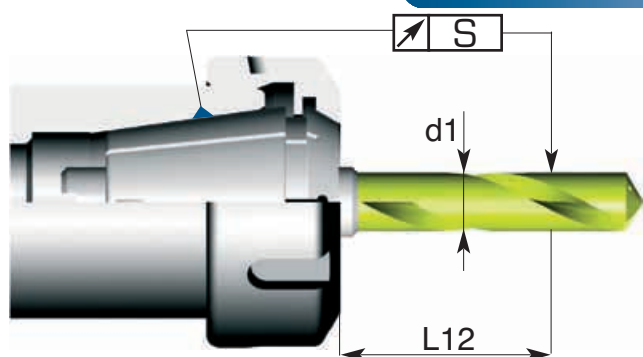


ART: 609



Riferimento Item	d1 min	d1 max	capacità Capacity	d2	d3	a	L	L13
ERC11	1	7	0.5 mm	11	11.3	8°	18	6.6
ERC16	1	10	0.5-1 mm	16	17	8°	27.5	10.5
ERC20	1	13	0.5-1 mm	20	21	8°	31.5	11.5
ERC25	3	16	0.5-1 mm	25	26	8°	34	12
ERC32	3	20	0.5-1 mm	32	33	8°	40	13
ERC40	3	26	1 mm	40	41	8°	46	15

PRECISIONE DI ROTAZIONE RUNOUT CONCENTRICITY



d1 min	d1 max	L12	Concentricità max "S" Classe 2
1	1.5	6	0.015
1.5	3	10	0.015
3	7	16	0.015
7	10	25	0.015
10	18	40	0.02
18	24	50	0.02
24	30	60	0.02
30	40	60	0.025

CARATTERISTICHE TECNICHE

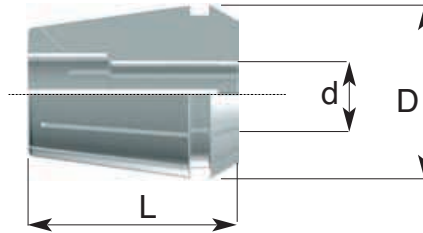
- Costruiti in acciaio 60 SiCr7
- Temprate • Rinvenute • HRC 46±2
- Rettificati di precisione esternamente ed
- Controllati con strumenti di misura certificati
- La tolleranza di rotazione delle pinze ER corrisponde ai valori della classe 2 - DIN 6499

STANDARD FEATURES

- Manufactured with Silicon Chrome steel similar to SAE 9262
- Quenched • tempered • RC 46±2
- Precision ground on shanks and inside tapers
- Tested with high Precision inspection and gaging equipment
- The runout accuracy of ER collets is equivalent to DIN 6499-Class 2

ACCESSORI PER MACCHINE UTENSILI

Pinze ER DIN 6499/B
 ER Collets DIN 6499/B
 Spannzangen ER DIN 6499/B
 Pincas de serrage ER DIN 6499/B


DIN 6499/B
ART: 609

12.
7

Codice di ord Code	d	ER	DXL	Cap. Pinza "d" Capacity range "d"
609.11.0010	1.0	ER 11	11.5 x 18	da Ø 1.0 a 0.5
609.11.0015	1.5	ER 11	11.5 x 18	da Ø 1.5 a 1.0
609.11.0020	2.0	ER 11	11.5 x 18	da Ø 2.0 a 1.5
609.11.0025	2.5	ER 11	11.5 x 18	da Ø 2.5 a 2.0
609.11.0030	3.0	ER 11	11.5 x 18	da Ø 3.0 a 2.5
609.11.0035	3.5	ER 11	11.5 x 18	da Ø 3.5 a 3.0
609.11.0040	4.0	ER 11	11.5 x 18	da Ø 4.0 a 3.5
609.11.0045	4.5	ER 11	11.5 x 18	da Ø 4.5 a 4.0
609.11.0050	5.0	ER 11	11.5 x 18	da Ø 5.0 a 4.5
609.11.0055	5.5	ER 11	11.5 x 18	da Ø 5.5 a 5.0
609.11.0060	6.0	ER 11	11.5 x 18	da Ø 6.0 a 5.5
609.11.0065	6.5	ER 11	11.5 x 18	da Ø 6.5 a 6.0
609.11.0070	7.0	ER 11	11.5 x 18	da Ø 7.0 a 6.5
609.16.0010	1.0	ER 16	17 x 27.5	da Ø 1.0 a 0.5
609.16.0020	2.0	ER 16	17 x 27.5	da Ø 2.0 a 1.0
609.16.0030	3.0	ER 16	17 x 27.5	da Ø 3.0 a 2.0
609.16.0040	4.0	ER 16	17 x 27.5	da Ø 4.0 a 3.0
609.16.0050	5.0	ER 16	17 x 27.5	da Ø 5.0 a 4.0
609.16.0060	6.0	ER 16	17 x 27.5	da Ø 6.0 a 5.0
609.16.0070	7.0	ER 16	17 x 27.5	da Ø 7.0 a 6.0
609.16.0080	8.0	ER 16	17 x 27.5	da Ø 8.0 a 7.0
609.16.0090	9.0	ER 16	17 x 27.5	da Ø 9.0 a 8.0
609.16.0100	10.0	ER 16	17 x 27.5	da Ø 10.0 a 9.0
609.20.0010	1.0	ER 20	21 x 31.5	da Ø 1.0 a 0.5
609.20.0020	2.0	ER 20	21 x 31.5	da Ø 2.0 a 1.0
609.20.0030	3.0	ER 20	21 x 31.5	da Ø 3.0 a 2.0
609.20.0040	4.0	ER 20	21 x 31.5	da Ø 4.0 a 3.0
609.20.0050	5.0	ER 20	21 x 31.5	da Ø 5.0 a 4.0
609.20.0060	6.0	ER 20	21 x 31.5	da Ø 6.0 a 5.0
609.20.0070	7.0	ER 20	21 x 31.5	da Ø 7.0 a 6.0
609.20.0080	8.0	ER 20	21 x 31.5	da Ø 8.0 a 7.0
609.20.0090	9.0	ER 20	21 x 31.5	da Ø 9.0 a 8.0
609.20.0100	10.0	ER 20	21 x 31.5	da Ø 10.0 a 9.0
609.20.0110	11.0	ER 20	21 x 31.5	da Ø 11.0 a 10.0
609.20.0120	12.0	ER 20	21 x 31.5	da Ø 12.0 a 11.0
609.20.0130	13.0	ER 20	21 x 31.5	da Ø 13.0 a 12.0
609.25.0020	2.0	ER 25	26 x 35	da Ø 2.0 a 1.0
609.25.0030	3.0	ER 25	26 x 35	da Ø 3.0 a 2.0
609.25.0040	4.0	ER 25	26 x 35	da Ø 4.0 a 3.0
609.25.0050	5.0	ER 25	26 x 35	da Ø 5.0 a 4.0
609.25.0060	6.0	ER 25	26 x 35	da Ø 6.0 a 5.0
609.25.0070	7.0	ER 25	26 x 35	da Ø 7.0 a 6.0
609.25.0080	8.0	ER 25	26 x 35	da Ø 8.0 a 7.0
609.25.0090	9.0	ER 25	26 x 35	da Ø 9.0 a 8.0
609.25.0100	10.0	ER 25	26 x 35	da Ø 10.0 a 9.0
609.25.0110	11.0	ER 25	26 x 35	da Ø 11.0 a 10.0
609.25.0120	12.0	ER 25	26 x 35	da Ø 12.0 a 11.0
609.25.0130	13.0	ER 25	26 x 35	da Ø 13.0 a 12.0
609.25.0140	14.0	ER 25	26 x 35	da Ø 14.0 a 13.0
609.25.0150	15.0	ER 25	26 x 35	da Ø 15.0 a 14.0
609.25.0160	16.0	ER 25	26 x 35	da Ø 16.0 a 15.0

Codice di ord Code	d	ER	DXL	Cap. Pinza "d" Capacity range "d"
609.32.0020	2.0	ER 32	33 x 40	da Ø 2.0 a 1.0
609.32.0030	3.0	ER 32	33 x 40	da Ø 3.0 a 2.0
609.32.0040	4.0	ER 32	33 x 40	da Ø 4.0 a 3.0
609.32.0050	5.0	ER 32	33 x 40	da Ø 5.0 a 4.0
609.32.0060	6.0	ER 32	33 x 40	da Ø 6.0 a 5.0
609.32.0070	7.0	ER 32	33 x 40	da Ø 7.0 a 6.0
609.32.0080	8.0	ER 32	33 x 40	da Ø 8.0 a 7.0
609.32.0090	9.0	ER 32	33 x 40	da Ø 9.0 a 8.0
609.32.0100	10.0	ER 32	33 x 40	da Ø 10.0 a 9.0
609.32.0110	11.0	ER 32	33 x 40	da Ø 11.0 a 10.0
609.32.0120	12.0	ER 32	33 x 40	da Ø 12.0 a 11.0
609.32.0130	13.0	ER 32	33 x 40	da Ø 13.0 a 12.0
609.32.0140	14.0	ER 32	33 x 40	da Ø 14.0 a 13.0
609.32.0150	15.0	ER 32	33 x 40	da Ø 15.0 a 14.0
609.32.0160	16.0	ER 32	33 x 40	da Ø 16.0 a 15.0
609.32.0170	17.0	ER 32	33 x 40	da Ø 17.0 a 16.0
609.32.0180	18.0	ER 32	33 x 40	da Ø 18.0 a 17.0
609.32.0190	19.0	ER 32	33 x 40	da Ø 19.0 a 18.0
609.32.0200	20.0	ER 32	33 x 40	da Ø 20.0 a 19.0
609.40.0030	3.0	ER 40	41 x 46	da Ø 3.0 a 2.0
609.40.0040	4.0	ER 40	41 x 46	da Ø 4.0 a 3.0
609.40.0050	5.0	ER 40	41 x 46	da Ø 5.0 a 4.0
609.40.0060	6.0	ER 40	41 x 46	da Ø 6.0 a 5.0
609.40.0070	7.0	ER 40	41 x 46	da Ø 7.0 a 6.0
609.40.0080	8.0	ER 40	41 x 46	da Ø 8.0 a 7.0
609.40.0090	9.0	ER 40	41 x 46	da Ø 9.0 a 8.0
609.40.0100	10.0	ER 40	41 x 46	da Ø 10.0 a 9.0
609.40.0110	11.0	ER 40	41 x 46	da Ø 11.0 a 10.0
609.40.0120	12.0	ER 40	41 x 46	da Ø 12.0 a 11.0
609.40.0130	13.0	ER 40	41 x 46	da Ø 13.0 a 12.0
609.40.0140	14.0	ER 40	41 x 46	da Ø 14.0 a 13.0
609.40.0150	15.0	ER 40	41 x 46	da Ø 15.0 a 14.0
609.40.0160	16.0	ER 40	41 x 46	da Ø 16.0 a 15.0
609.40.0170	17.0	ER 40	41 x 46	da Ø 17.0 a 16.0
609.40.0180	18.0	ER 40	41 x 46	da Ø 18.0 a 17.0
609.40.0190	19.0	ER 40	41 x 46	da Ø 19.0 a 18.0
609.40.0200	20.0	ER 40	41 x 46	da Ø 20.0 a 19.0
609.40.0210	21.0	ER 40	41 x 46	da Ø 21.0 a 20.0
609.40.0220	22.0	ER 40	41 x 46	da Ø 22.0 a 21.0
609.40.0230	23.0	ER 40	41 x 46	da Ø 23.0 a 22.0
609.40.0240	24.0	ER 40	41 x 46	da Ø 24.0 a 23.0
609.40.0250	25.0	ER 40	41 x 46	da Ø 25.0 a 24.0
609.40.0260	26.0	ER 40	41 x 46	da Ø 26.0 a 25.0
609.40.0270	27.0	ER 40	41 x 46	da Ø 27.0 a 26.0
609.40.0280	28.0	ER 40	41 x 46	da Ø 28.0 a 27.0
609.40.0290	29.0	ER 40	41 x 46	da Ø 29.0 a 28.0
609.40.0300	30.0	ER 40	41 x 46	da Ø 30.0 a 29.0

12. ACCESSORI ACCESSORIES



Pinze ER a tenuta per utensili con fori di lubrificazione DIN 6499/A - Ultra precise

Sealed ER collets DIN 6499/A for coolant through tools - High precision

Spannzangen ER DIN 6499/A für Innenkühlung - Ultra Präzision

Pinces étanches ER DIN 6499/A pour outils avec passage de refroidissement - ultra précises

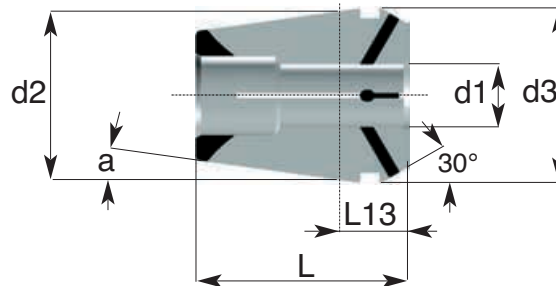
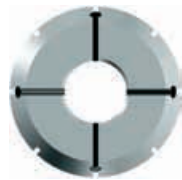
ACCESSORI PER MACCHINE UTENSILI



DIN 6499/A

ART: 609.UPS

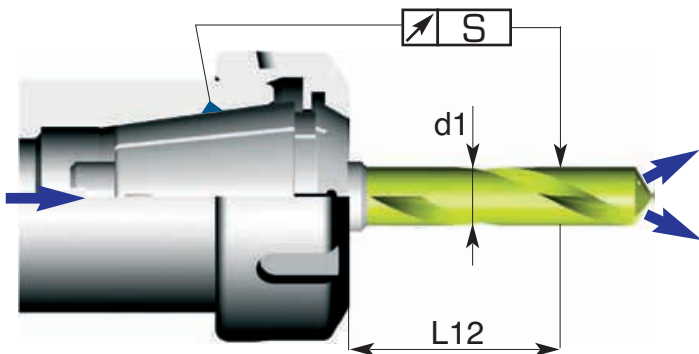
12.
8



Pressione di esercizio
fino a 70 bar
High-pressure coolant
supply up to 70 bar

Riferimento Item	d1 min	d1 max	capacità Capacity	d2	d3	a	L	L13
ERC11	1	7	nominale	11	11.3	8°	18	4.5
ERC16	1	10	nominale	16	16.74	8°	27.5	6.3
ERC20	1	13	nominale	20	20.74	8°	31.5	7.2
ERC25	3	16	nominale	25	25.74	8°	34	7.5
ERC32	3	20	nominale	32	32.74	8°	40	8.2
ERC40	3	26	nominale	40	40.74	8°	46	10.5

PRECISIONE DI ROTAZIONE RUNOUT CONCENTRICITY



d1 min	d max	L12	Concentricità max "S" Classe 1 ultra preciso
1	1.6	6	0.005
1.6	3	10	0.008
3	7	16	0.008
7	10	25	0.008
10	18	40	0.010
18	26	80	0.010

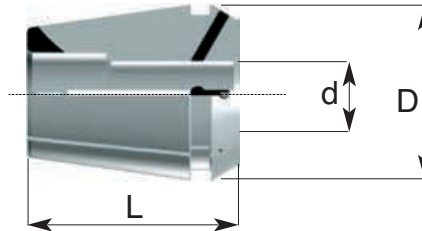
CARATTERISTICHE TECNICHE

- Costruiti in acciaio 60 SiCr7
- Temprate • Rinvenute • HRC 46±2
- Rettificati di precisione esternamente ed
- Controllati con strumenti di misura certificati
- La tolleranza di rotazione delle pinze ER corrisponde ai valori della classe 1 - DIN 6499

STANDARD FEATURES

- Manufactured with Silicon Chrome steel similar to SAE 9262
- Quenched • tempered • RC 46±2
- Precision ground on shanks and inside tapers
- Tested with high Precision inspection and gaging equipment
- The runout accuracy of ER collets is equivalent to DIN 6499-Class 1

ACCESSORI PER MACCHINE UTENSILI
Pinze ER a tenuta per utensili con fori di lubrificazione DIN 6499/A
Sealed ER collets DIN 6499/A for coolant through tools
Spannzangen ER DIN 6499/A für Innenkühlung
Pinces étanches ER DIN 6499/A pour outils avec passage de refroidissement

DIN 6499/A
ART: 609.UPS
Ultra precise class 1/High precision class 1

12.
9

Codice di ord Code	d	ER	DXL	Cap. Pinza "d" Capacity range "d"
609.11.0030.UPS	3	ER 11	11.3 x 18	nominale
609.11.0040.UPS	4	ER 11	11.3 x 18	nominale
609.11.0050.UPS	5	ER 11	11.3 x 18	nominale
609.11.0060.UPS	6	ER 11	11.3 x 18	nominale
609.11.0070.UPS	7	ER 11	11.3 x 18	nominale
609.16.0030.UPS	3	ER 16	16.74 x 27.5	nominale
609.16.0040.UPS	4	ER 16	16.74 x 27.5	nominale
609.16.0050.UPS	5	ER 16	16.74 x 27.5	nominale
609.16.0060.UPS	6	ER 16	16.74 x 27.5	nominale
609.16.0070.UPS	7	ER 16	16.74 x 27.5	nominale
609.16.0080.UPS	8	ER 16	16.74 x 27.5	nominale
609.16.0090.UPS	9	ER 16	16.74 x 27.5	nominale
609.16.0100.UPS	10	ER 16	16.74 x 27.5	nominale
609.20.0030.UPS	3	ER 20	20.74 x 31.5	nominale
609.20.0040.UPS	4	ER 20	20.74 x 31.5	nominale
609.20.0050.UPS	5	ER 20	20.74 x 31.5	nominale
609.20.0060.UPS	6	ER 20	20.74 x 31.5	nominale
609.20.0070.UPS	7	ER 20	20.74 x 31.5	nominale
609.20.0080.UPS	8	ER 20	20.74 x 31.5	nominale
609.20.0090.UPS	9	ER 20	20.74 x 31.5	nominale
609.20.0100.UPS	10	ER 20	20.74 x 31.5	nominale
609.20.0110.UPS	11	ER 20	20.74 x 31.5	nominale
609.20.0120.UPS	12	ER 20	20.74 x 31.5	nominale
609.20.0130.UPS	13	ER 20	20.74 x 31.5	nominale
609.25.0030.UPS	3	ER 25	25.74 x 34	nominale
609.25.0040.UPS	4	ER 25	25.74 x 34	nominale
609.25.0050.UPS	5	ER 25	25.74 x 34	nominale
609.25.0060.UPS	6	ER 25	25.74 x 34	nominale
609.25.0070.UPS	7	ER 25	25.74 x 34	nominale
609.25.0080.UPS	8	ER 25	25.74 x 34	nominale
609.25.0090.UPS	9	ER 25	25.74 x 34	nominale
609.25.0100.UPS	10	ER 25	25.74 x 34	nominale
609.25.0110.UPS	11	ER 25	25.74 x 34	nominale
609.25.0120.UPS	12	ER 25	25.74 x 34	nominale
609.25.0130.UPS	13	ER 25	25.74 x 34	nominale
609.25.0140.UPS	14	ER 25	25.74 x 34	nominale
609.25.0150.UPS	15	ER 25	25.74 x 34	nominale
609.25.0160.UPS	16	ER 25	25.74 x 34	nominale

Codice di ord Code	d	ER	DXL	Cap. Pinza "d" Capacity range "d"
609.32.0030.UPS	3	ER 32	32.74 x 40	nominale
609.32.0040.UPS	4	ER 32	32.74 x 40	nominale
609.32.0050.UPS	5	ER 32	32.74 x 40	nominale
609.32.0060.UPS	6	ER 32	32.74 x 40	nominale
609.32.0070.UPS	7	ER 32	32.74 x 40	nominale
609.32.0080.UPS	8	ER 32	32.74 x 40	nominale
609.32.0090.UPS	9	ER 32	32.74 x 40	nominale
609.32.0100.UPS	10	ER 32	32.74 x 40	nominale
609.32.0110.UPS	11	ER 32	32.74 x 40	nominale
609.32.0120.UPS	12	ER 32	32.74 x 40	nominale
609.32.0130.UPS	13	ER 32	32.74 x 40	nominale
609.32.0140.UPS	14	ER 32	32.74 x 40	nominale
609.32.0150.UPS	15	ER 32	32.74 x 40	nominale
609.32.0160.UPS	16	ER 32	32.74 x 40	nominale
609.32.0170.UPS	17	ER 32	32.74 x 40	nominale
609.32.0180.UPS	18	ER 32	32.74 x 40	nominale
609.32.0190.UPS	19	ER 32	32.74 x 40	nominale
609.32.0200.UPS	20	ER 32	32.74 x 40	nominale
609.40.0030.UPS	3	ER 40	40.74 x 46	nominale
609.40.0040.UPS	4	ER 40	40.74 x 46	nominale
609.40.0050.UPS	5	ER 40	40.74 x 46	nominale
609.40.0060.UPS	6	ER 40	40.74 x 46	nominale
609.40.0070.UPS	7	ER 40	40.74 x 46	nominale
609.40.0080.UPS	8	ER 40	40.74 x 46	nominale
609.40.0090.UPS	9	ER 40	40.74 x 46	nominale
609.40.0100.UPS	10	ER 40	40.74 x 46	nominale
609.40.0110.UPS	11	ER 40	40.74 x 46	nominale
609.40.0120.UPS	12	ER 40	40.74 x 46	nominale
609.40.0130.UPS	13	ER 40	40.74 x 46	nominale
609.40.0140.UPS	14	ER 40	40.74 x 46	nominale
609.40.0150.UPS	15	ER 40	40.74 x 46	nominale
609.40.0160.UPS	16	ER 40	40.74 x 46	nominale
609.40.0170.UPS	17	ER 40	40.74 x 46	nominale
609.40.0180.UPS	18	ER 40	40.74 x 46	nominale
609.40.0190.UPS	19	ER 40	40.74 x 46	nominale
609.40.0200.UPS	20	ER 40	40.74 x 46	nominale
609.40.0210.UPS	21	ER 40	40.74 x 46	nominale
609.40.0220.UPS	22	ER 40	40.74 x 46	nominale
609.40.0230.UPS	23	ER 40	40.74 x 46	nominale
609.40.0240.UPS	24	ER 40	40.74 x 46	nominale
609.40.0250.UPS	25	ER 40	40.74 x 46	nominale
609.40.0260.UPS	26	ER 40	40.74 x 46	nominale

Pinze portamaschi con quadro ER DIN 6499/A

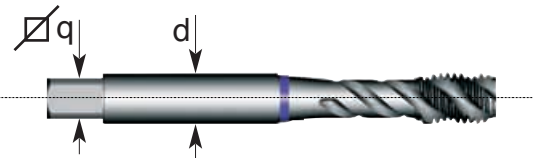
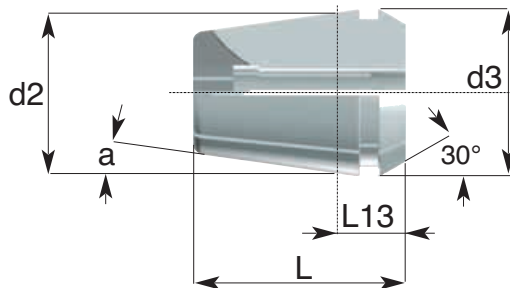
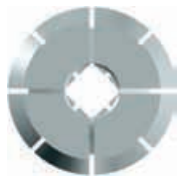
Tapping ER collets DIN 6499/A with internal square
Gewindebohrzangen ER DIN 6499/A mit Innenvierkant
Pincas de taradage ER DIN 6499/A avec carré interieur

ACCESSORI PER MACCHINE UTENSILI



DIN 6499/A

ART: 609M



Riferimento Item	d1 min	d1 max	capacità Capacity	d2	d3	a	L	L13
ERC16	3.5	8	nominale	16	16.74	8°	27.5	6.3
ERC20	3.5	10	nominale	20	20.74	8°	31.5	7.2
ERC25	3.5	12	nominale	25	25.74	8°	34	7.5
ERC32	4	16	nominale	32	32.74	8°	40	8.2
ERC40	4	20	nominale	40	40.74	8°	46	10.5

CARATTERISTICHE TECNICHE

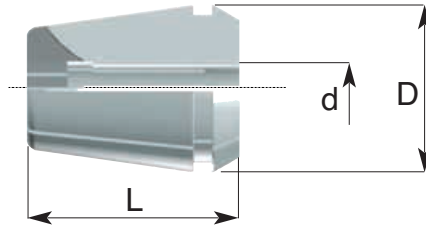
- Costruiti in acciaio 60 SiCr7
- Temprate • Rinvenute • HRC 46±2
- Rettificati di precisione esternamente ed
- Controllati con strumenti di misura certificati
- La tolleranza di rotazione delle pinze ER corrisponde ai valori della classe 2 - DIN 6499

STANDARD FEATURES

- Manufactured with Silicon Chrome steel similar to SAE 9262
- Quenched • tempered • RC 46±2
- Precision ground on shanks and inside tapers
- Tested with high Precision inspection and gaging equipment
- The runout accuracy of ER collets is equivalent to DIN 6499-Class 2

ACCESSORI PER MACCHINE UTENSILI

Pinze portamaschi con quadro ER DIN 6499/A
Tapping ER collets DIN 6499/A with internal square
Gewindebohrzangen ER DIN 6499/A mit Innenvierkant
Pinces de taraudage ER DIN 6499/A avec carré intérieur


DIN 6499/B
ART: 609.M

12.
11

Codice di ord <i>Code</i>	d X q	ER	DXL	Per maschi <i>For tap size</i>
609.16.0035.M	3.5 X 2.7	ER 16	16.74 x 275	M 3
609.16.0040.M	4.0 X 3.0	ER 16	16.74 x 275	M 3,5
609.16.0045.M	4.5 X 3.4	ER 16	16.74 x 275	M 4
609.16.0050.M	5.0 X 4.0	ER 16	16.74 x 275	M 5
609.16.0060.M	6.0 X 4.9	ER 16	16.74 x 275	M 4,5 - 5 - 6 - 7 - 8
609.16.0063.M	6.3 X 5.0	ER 16	16.74 x 275	M 6 - 8
609.16.0070.M	7.0 X 5.5	ER 16	16.74 x 275	M 9 - 10
609.16.0080.M	8.0 X 6.2	ER 16	16.74 x 275	M 11
609.20.0035.M	3.5 X 2.7	ER 20	20.74 x 315	M 3
609.20.0040.M	4.0 X 3.0	ER 20	20.74 x 315	M 3,5
609.20.0045.M	4.5 X 3.4	ER 20	20.74 x 315	M 4
609.20.0060.M	6.0 X 4.9	ER 20	20.74 x 315	M 4,5 - 5 - 6 - 7 - 8
609.20.0080.M	8.0 X 6.2	ER 20	20.74 x 315	M 11
609.20.0090.M	9.0 X 7.0	ER 20	20.74 x 315	M 12
609.20.0100.M	10.0 X 8.0	ER 20	20.74 x 315	M 10
609.25.0035.M	3.5 X 2.7	ER 25	25.74 x 34	M 3
609.25.0040.M	4.0 X 3.0	ER 25	25.74 x 34	M 3,5
609.25.0045.M	4.5 X 3.4	ER 25	25.74 x 34	M 4
609.25.0050.M	5.0 X 4.0	ER 25	25.74 x 34	M 5
609.25.0060.M	6.0 X 4.9	ER 25	25.74 x 34	M 4,5 - 5 - 6 - 7 - 8
609.25.0063.M	6.3 X 5.0	ER 25	25.74 x 34	M 6 - 8
609.25.0070.M	7.0 X 5.5	ER 25	25.74 x 34	M 9 - 10
609.25.0080.M	8.0 X 6.2	ER 25	25.74 x 34	M 11
609.25.0090.M	9.0 X 7.0	ER 25	25.74 x 34	M 12
609.25.0100.M	10.0 X 8.0	ER 25	25.74 x 34	M 10
609.25.0110.M	11.0 X 9.0	ER 25	25.74 x 34	M 14
609.25.0112.M	11.2 X 9.0	ER 25	25.74 x 34	M 14
609.25.0120.M	12.0 X 9.0	ER 25	25.74 x 34	M 16

Codice di ord <i>Code</i>	d X q	ER	DXL	Per maschi <i>For tap size</i>
609.32.0040.M	4.0 X 3.0	ER 32	32.74 x 40	M 3,5
609.32.0045.M	4.5 X 3.4	ER 32	32.74 x 40	M 4
609.32.0050.M	5.0 X 4.0	ER 32	32.74 x 40	M 5
609.32.0060.M	6.0 X 4.9	ER 32	32.74 x 40	M 4,5 - 5 - 6 - 7 - 8
609.32.0063.M	6.3 X 5.0	ER 32	32.74 x 40	M 6 - 8
609.32.0070.M	7.0 X 5.5	ER 32	32.74 x 40	M 9 - 10
609.32.0080.M	8.0 X 6.2	ER 32	32.74 x 40	M 11
609.32.0090.M	9.0 X 7.0	ER 32	32.74 x 40	M 12
609.32.0100.M	10.0 X 8.0	ER 32	32.74 x 40	M 10
609.32.0110.M	11.0 X 9.0	ER 32	32.74 x 40	M 14
609.32.0112.M	11.2 X 9.0	ER 32	32.74 x 40	M 14
609.32.0120.M	12.0 X 9.0	ER 32	32.74 x 40	M 16
609.32.0125.M	12.5 X 10	ER 32	32.74 x 40	M 16
609.32.0140.M	14.0 X 11.0	ER 32	32.74 x 40	M 18
609.32.0160.M	16.0 X 12.0	ER 32	32.74 x 40	M 20
609.40.0060.M	6.0 X 4.9	ER 40	40.74 x 46	M 4,5 - 5 - 6 - 7 - 8
609.40.0063.M	6.3 X 5.0	ER 40	40.74 x 46	M 6 - 8
609.40.0070.M	7.0 X 5.5	ER 40	40.74 x 46	M 9 - 10
609.40.0080.M	8.0 X 6.2	ER 40	40.74 x 46	M 11
609.40.0090.M	9.0 X 7.0	ER 40	40.74 x 46	M 12
609.40.0100.M	10.0 X 8.0	ER 40	40.74 x 46	M 10
609.40.0110.M	11.0 X 9.0	ER 40	40.74 x 46	M 14
609.40.0112.M	11.2 X 9.0	ER 40	40.74 x 46	M 14
609.40.0120.M	12.0 X 9.0	ER 40	40.74 x 46	M 16
609.40.0125.M	12.5 X 10	ER 40	40.74 x 46	M 16
609.40.0140.M	14.0 X 11.0	ER 40	40.74 x 46	M 18
609.40.0160.M	16.0 X 12.0	ER 40	40.74 x 46	M 20
609.40.0180.M	18.0 X 14.5	ER 40	40.74 x 46	M 22 - 24
609.40.0200.M	20.0 X 16.0	ER 40	40.74 x 46	M 27

12. ACCESSORI

ACCESSORIES



Serie pinze ER - Standard

Set of ER Collets

Satz von Spannzangen ER

Série de pinces de serrage ER

ACCESSORI PER MACCHINE UTENSILI

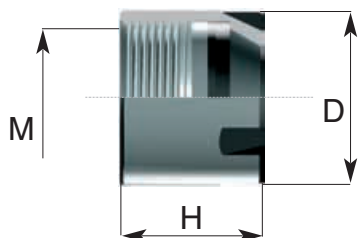
ART: SERIE PINZE ER
ART: 609 standard

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12

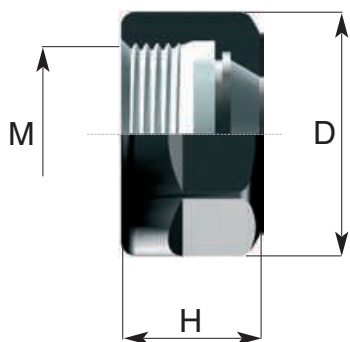


Codice di ord. Code	Tipo pinze Collets type	Quantità pinze Collets Qty.	Ø Pinze Ø Collets
S.13.ER11	ER11	13	da Ø 1.0 a 7.0
S.08.ER16	ER16	8	da Ø 3.0 a 10.0
S.10.ER16	ER16	10	da Ø 1.0 a 10.0
S.11.ER20	ER20	11	da Ø 3.0 a 13.0
S.13.ER20	ER20	13	da Ø 1.0 a 13.0
S.14.ER25	ER25	14	da Ø 3.0 a 16.0
S.15.ER25	ER25	15	da Ø 2.0 a 16.0
S.18.ER32	ER32	18	da Ø 3.0 a 20.0
S.19.ER32	ER32	19	da Ø 2.0 a 20.0
S.23.ER40	ER40	23	da Ø 4.0 a 26.0

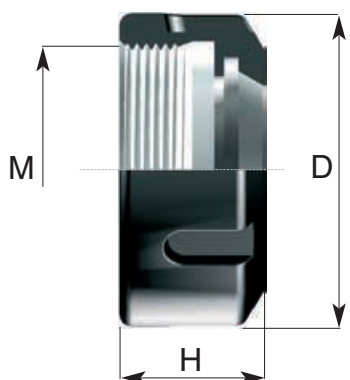
ACCESSORI PER MACCHINE UTENSILI

 Ghiera di bloccaggio pinze ER
ER clamping nuts
Spannmuttern ER
Écrous de serrage ER
DIN 6499
ART: GHIERE ER
12.
13


Codice di ord. Code	ER	M	D	H
245.13.ER11M	UM.ER11 mini	M13 X 0,75	16	12
245.19.ER16M	UM.ER16 mini	M19 X 1	22	18
245.24.ER20M	UM.ER20 mini	M24 X 1	28	19
245.30.ER25M	UM.ER25 mini	M30 X 1	35	20

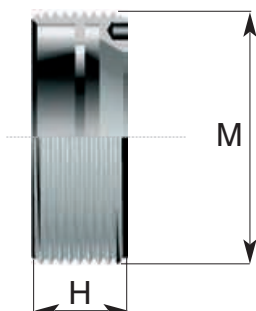


Codice di ord. Code	ER	M	D	H
245.14.ER11	UM.ER11	M14 X 0,75	19	11,3
245.22.ER16	UM.ER16	M22 X 1,5	28	17
245.25.ER20	UM.ER20	M25 X 1,5	34	19



Codice di ord. Code	ER	M	D	H
245.32.ER25	UM.ER25	M32 X 1,5	42	21
245.40.ER32	UM.ER32	M40 X 1,5	50	23
245.50.ER40	UM.ER40	M50 X 1,5	63	26
* 245.32.ER25.AV	UM.ER25	M32 X 1,5	42	21
* 245.40.ER32.AV	UM.ER32	M40 X 1,5	50	23
* 245.50.ER40.AV	UM.ER40	M50 X 1,5	63	26
** 245.32.ER25.B	UM.ER25	M32 X 1,5	42	21
** 245.40.ER32.B	UM.ER32	M40 X 1,5	50	23
** 245.50.ER40.B	UM.ER40	M50 X 1,5	63	26

 *Ghiere concentriche
**Concentric nuts*

 **Ghiere con sfere
***Ball bearing nuts*


Codice di ord. Code	ER	M	H
245.40.ER32.EC	UM.ER32	M40 X 1,5	14

Ghiera di bloccaggio pinze EOC

EOC clamping nuts

Spannmuttern EOC

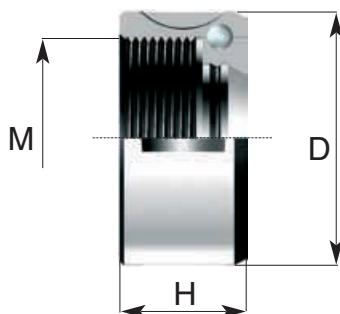
Écrous de serrage EOC

ACCESSORI PER MACCHINE UTENSILI

Ghiere tipo EOC DIN 6388



ART: GHIERE EOC



Codice di ord. Code	EOC	M	D	H
245.48.0350	25	M48X2	60	30
245.60.0440	32	M60X2	72	33.5

Ghiera di bloccaggio pinze "Delta"

"Delta" clamping nuts

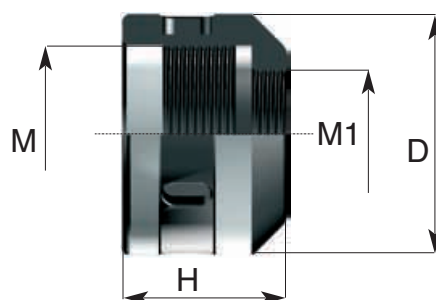
Spannmuttern "Delta"

Écrous de serrage "Delta"

Ghiere tipo DELTA



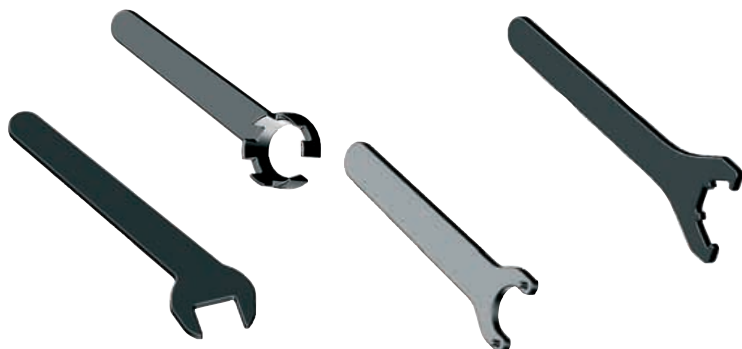
ART: GHIERE DELTA



Codice di ord. Code	M	M 1	D	H
245.01	M38 x 2	M 26 x 2 sin.	50	35
245.02	M44 x 2	M 32 x 2 sin.	58	41
245.03	M58 x 2	M 44 x 2 sin.	74	45

ACCESSORI PER MACCHINE UTENSILI

Chiavi per ghiera ER
ER spanners
Spannschlüssel ER
Clés de serrage ER



ART: CHIAVI

12.
15



Codice di ord. <i>Code</i>	ER
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CH.12.ER8M	ER8 MINI
CH.16.ER11M	ER11 MINI
CH.22.ER16M	ER16 MINI
CH.28.ER20M	ER20 MINI



Codice di ord. <i>Code</i>	ER
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CH.17.ER16	ER 11
CH.25.ER16	ER 16
CH.30.ER20	ER 20



Codice di ord. <i>Code</i>	ER
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CH.42.ER25	ER 25
CH.50.ER32	ER 32
CH.65.ER40	ER 40



Codice di ord. <i>Code</i>	ER
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CH.04.ER32.EC	ER 32
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Istruzioni per l'assemblaggio delle ghiera e pinze ER DIN 6499
Instructions for the assembly of ER DIN 6499 nuts and collets
Montageanleitung für Spannzangen und Spannmuttern ER DIN 6499
Instructions d'assemblage pour pinces et écrous ER DIN 6499

ACCESSORI PER MACCHINE UTENSILI

DIN 6499

ER

12
16

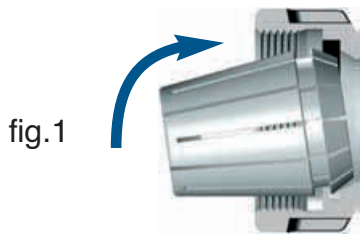


fig.1

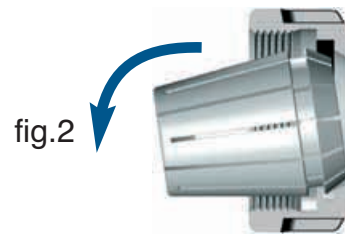


fig.2

ASSEMBLAGGIO DELLA PINZA

Introdurre la pinza inclinata nella ghiera di serraggio per accoppiare la scanalatura della pinza "A" con la sede eccentrica della ghiera "B". In seguito applicare una forza nel verso indicato dalla freccia in (fig.1). Per estrarre la pinza applicare una forza nel verso indicato dalla freccia in (fig. 2).

COLLET INSERTING

Insert the collet inclined into the clamping nut, to couple the collet groove "A" with the eccentric ring extractor "B". Then apply a force in the direction shown by the arrow (fig.1) To remove the collect apply a force in the direction shown by the arrow (fig.2)

SPANNZANGE MONTAGE

Die schräge Spannzange in die Spannmutter einführen, um die Rille der Spannzange "A" zu dem Mutterxzenterring "B" zu verbinden. Dann, in die Pfeilrichtung (fig.1) Kraft anwenden. In die Pfeilrichtung (fig.2) Kraft anwenden die Spannzange herauszuziehen.

MONTAGE DE LA PINCE

Positionner la pince inclinée dans l'écrou pour coupler la rainure de la pince "A" avec la bague excentrique de l'écrou "B". Ensuite appliquer une force dans la direction indiquée par la flèche (fig.1). Pour enlever la pince, appliquer une force dans la direction indiquée par la flèche (fig.2)

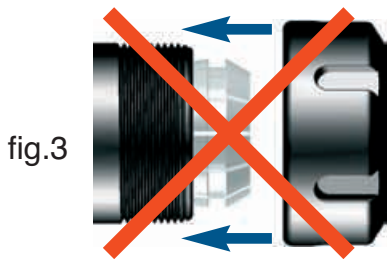


fig.3

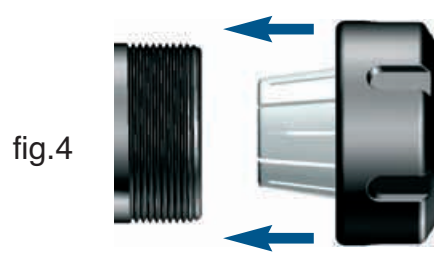


fig.4

GENERALITA'

Le pinze ER devono essere inserite nelle ghiera prima di montarle con l'utensile sul mandrino. La mancata osservanza di questa condizione provoca il danneggiamento definitivo della pinza e della ghiera di serraggio.

FEATURES

ER collets must be connected into the nut before inserting them with the tool into the chuck. A wrong assembly causes the definitive damage of both collet and clamping nut.

KENNZEICHEN

Die Spannzangen ER müssen zuerst in die Spannmutter eingeführt werden, dann mit dem Werkzeug auf den Halter aufgestellt werden. Nichtbeachtung dieser Montageanleitung wird Spannzange und Spannmutter beschädigen.

GÉNÉRALITÉS

Les pinces ER doivent être positionnées dans l'écrou avant de les monter avec l'outils sur le mandrin. Un montage pas conforme cause le dommage irréparable de la pince et de l'écrou.

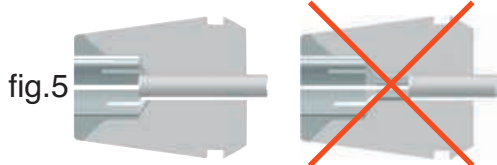


fig.5

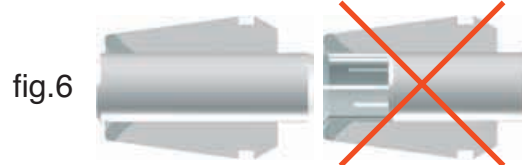


fig.6



GENERALITA'

Per ottenere il miglior bloccaggio il gambo dell'utensile deve occupare la totalità del diametro interno rettificato della pinza.

FEATURES

For a better clamping, the tool shank must occupy the whole internal grinded diameter of the collet.

KENNZEICHEN

Der Werkzeugschaft muss den ganzen Innendurchmesser der Spannzange einnehmen um eine feste Einspannung zu erreichen..

GÉNÉRALITÉS

Pour un meilleur blocage, la queue de l'outil doit occuper la totalité du diamètre intérieur rectifié de la pince.

ACCESSORI PER MACCHINE UTENSILI


Coppie di serraggio consigliate per le ghiera ER
Recommended clamping torque for ER nuts
Spannungskräftepaar für Spannmuttern ER
Couple de serrage conseillé pour écrous ER

COPPIE DI SERRAGGIO GHIERE ER
12.
17
ER MINI


Ghiera <i>Nuts</i>	Filetto <i>Thread</i>	Coppia max <i>Max torque</i>	Coppia max <i>Max torque</i>
ER 8 mini	M 10 X 0.75	5 Nm	5 Nm
ER 11 mini	M 13 X 0.75	15 Nm	20 Nm
ER 16 mini	M 19 X 1	25 Nm	30 Nm
ER 20 mini	M 24 X 1	25 Nm	35 Nm
ER 25 mini	M 30 X 1	35 Nm	40 Nm

ER STANDARD


Ghiera <i>Nuts</i>	Filetto <i>Thread</i>	Coppia max <i>Max torque</i>	Coppia max <i>Max torque</i>
ER 11	M 14 X 0.75	18 Nm	22 Nm
ER 16	M 22 X 1.5	50 Nm	70 Nm
ER 20	M 25 X 1.5	50 Nm	80 Nm
ER 25	M 32 X 1.5	90 Nm	130 Nm
ER 32	M 40 X 1.5	130 Nm	160 Nm
ER 40	M 50 X 1.5	190 Nm	220 Nm
ER 50	M 64 X 2	300 Nm	300 Nm

CARATTERISTICHE TECNICHE

- Non superare le coppie di serraggio consigliate per non danneggiare la ghiera, la pinza e deformare la sede del mandrino
- I valori max di coppia sono da adottare per i diametri max delle pinze

STANDARD FEATURES

- Do not exceed the recommended clamping torque value not to damage the nut, the collet and the toolholder's collet cavity.
- The max torque is suitable for the max diameter capacity of the collets.

Bussole portamaschio a cambio rapido

Quick change tap holder bushes

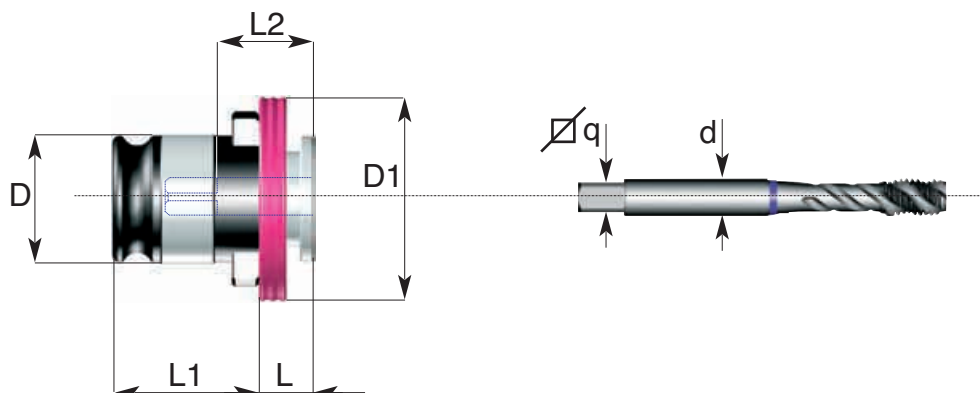
Hülsen für Gewindeschneid-Schnellwechselfutter

Douilles porte-tarands à changement rapide

ACCESSORI PER MACCHINE UTENSILI



ART: 665

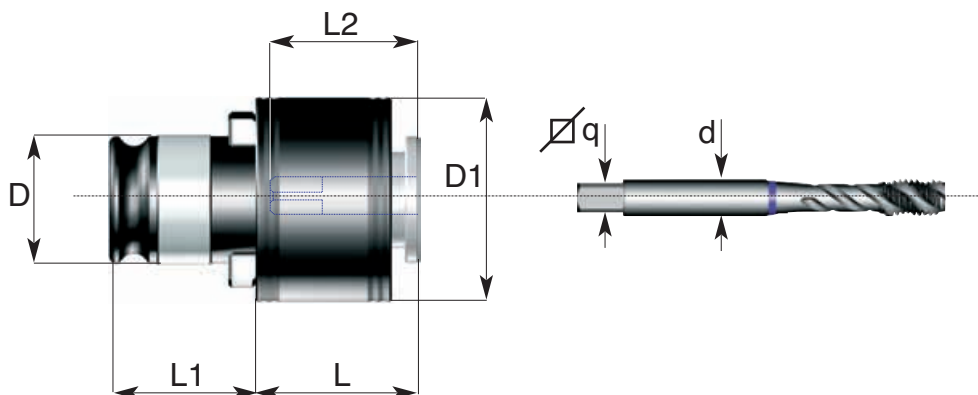


12,
18

Codice di ord Code	D	D1	d X q	Bussole tipo For collet	L	L1	L2	Per maschi For tap size
665.19.0250	19	30	2.5 x 2.1	1	7	21.5	17	M 1,2-1,4-1,6-1,7-1,8
665.19.0280	19	30	2.8 x 2.1	1	7	21.5	17	M 2-2,2-2,3-2,5-2,6
665.19.0350	19	30	3.5 x 2.7	1	7	21.5	17	M 3
665.19.0400	19	30	4.0 x 3.0	1	7	21.5	17	M 3,5
665.19.0450	19	30	4.5 x 3.4	1	7	21.5	17	M 4
665.19.0500	19	30	5.0 x 4.0	1	7	21.5	17	M 5
665.19.0600	19	30	6.0 x 4.9	1	7	21.5	17	M 4,5-5-6-7-8
665.19.0630	19	30	6.3 x 5	1	7	21.5	17	M 6
665.19.0700	19	30	7.0 x 5.5	1	7	21.5	17	M 9-10
665.19.0800	19	30	8.0 x 6.2	1	7	21.5	17	M 11
665.19.0900	19	30	9.0 x 7.0	1	7	21.5	17	M 12
665.19.1000	19	30	10.0 x 8.0	1	7	21.5	17	M 10
665.19.1100	19	30	11.0 x 9.0	1	7	21.5	17	M 14
665.31.0600	31	46	6.0 x 4.9	2	11	35	30	M 4,5-5-6-7-8
665.31.0630	31	46	6.3 x 5.0	2	11	35	30	M 6-8
665.31.0700	31	46	7.0 x 5.5	2	11	35	30	M 9-10
665.31.0800	31	46	8.0 x 6.2	2	11	35	30	M 11
665.31.0900	31	46	9.0 x 7.0	2	11	35	30	M 12
665.31.1000	31	46	10.0 x 8.0	2	11	35	30	M 10
665.31.1100	31	46	11.0 x 9.0	2	11	35	30	M 14
665.31.1200	31	46	12.0 x 9.0	2	11	35	30	M 16
665.31.1400	31	46	14.0 x 11.0	2	11	35	30	M 18
665.31.1600	31	46	16.0 x 12.0	2	11	35	30	M 20
665.31.1800	31	46	18.0 x 14.5	2	11	35	30	M 22-24
665.48.1100	48	68	11.0 x 9.0	3	16	55.5	44	M 14
665.48.1200	48	68	12.0 x 9.0	3	16	55.5	44	M 16
665.48.1400	48	68	14.0 x 11.0	3	16	55.5	44	M 18
665.48.1600	48	68	16.0 x 12.0	3	16	55.5	44	M 20
665.48.1800	48	68	18.0 x 14.5	3	16	55.5	44	M 22-24
665.48.2000	48	68	20.0 x 16.0	3	16	55.5	44	M 27
665.48.2200	48	68	22.0 x 18.0	3	16	55.5	44	M 30
665.48.2500	48	68	25.0 x 20.0	3	16	55.5	44	M 33
665.48.2800	48	68	28.0 x 22.0	3	16	55.5	44	M 36

ACCESSORI PER MACCHINE UTENSILI

Bussole portamaschio con accoppiamento di sicurezza a frizione registrabile
Quick change tap holder bushes with clutch safety fit
Hülsen für Gewindeschneid-Schnellwechselfutter mit Sicherheitsreibungskupplung
Douilles porte-tarauds à changement rapide avec accouplement de sûreté à friction


ART: 668

12.
19

Codice di ord <i>Code</i>	D	D1	d X q	Bussole tipo <i>For collet</i>	L	L1	L2	Per maschi <i>For tap size</i>
668.19.0250	19	32	2.5 x 2.1	1	25	21.5	17	M 1,2-1,4-1,6-1,7-1,8
668.19.0280	19	32	2.8 x 2.1	1	25	21.5	17	M 2-2,2-2,3-2,5-2,6
668.19.0350	19	32	3.5 x 2.7	1	25	21.5	17	M 3
668.19.0400	19	32	4.0 x 3.0	1	25	21.5	17	M 3,5
668.19.0450	19	32	4.5 x 3.4	1	25	21.5	17	M 4
668.19.0500	19	32	5.0 x 4.0	1	25	21.5	17	M 5
668.19.0600	19	32	6.0 x 4.9	1	25	21.5	17	M 4,5-5-6-7-8
668.19.0630	19	32	6.3 x 5.0	1	25	21.5	17	M 6-8
668.19.0700	19	32	7.0 x 5.5	1	25	21.5	17	M 9-10
668.19.0800	19	32	8.0 x 6.2	1	25	21.5	17	M 11
668.19.0900	19	32	9.0 x 7.0	1	25	21.5	17	M 12
668.19.1000	19	32	10.0 x 8.0	1	25	21.5	17	M 10
668.19.1100	19	32	11.0 x 9.0	1	25	21.5	17	M 14
668.31.0600	31	50	6.0 x 4.9	2	34	35	30	M 4,5-5-6-7-8
668.31.0630	31	50	6.3 x 5.0	2	34	35	30	M 6-8
668.31.0700	31	50	7.0 x 5.5	2	34	35	30	M 9-10
668.31.0800	31	50	8.0 x 6.2	2	34	35	30	M 11
668.31.0900	31	50	9.0 x 7.0	2	34	35	30	M 12
668.31.1000	31	50	10.0 x 8.0	2	34	35	30	M 10
668.31.1100	31	50	11.0 x 9.0	2	34	35	30	M 14
668.31.1200	31	50	12.0 x 9.0	2	34	35	30	M 16
668.31.1400	31	50	14.0 x 11.0	2	34	35	30	M 18
668.31.1600	31	50	16.0 x 12.0	2	34	35	30	M 20
668.31.1800	31	50	18.0 x 14.5	2	34	35	30	M 22-24
668.48.1100	48	72	11.0 x 9.0	3	45	55.5	44	M 14
668.48.1200	48	72	12.0 x 9.0	3	45	55.5	44	M 16
668.48.1400	48	72	14.0 x 11.0	3	45	55.5	44	M 18
668.48.1600	48	72	16.0 x 12.0	3	45	55.5	44	M 20
668.48.1800	48	72	18.0 x 14.5	3	45	55.5	44	M 22-24
668.48.2000	48	72	20.0 x 16.0	3	45	55.5	44	M 27
668.48.2200	48	72	22.0 x 18.0	3	45	55.5	44	M 30
668.48.2500	48	72	25.0 x 20.0	3	45	55.5	44	M 33
668.48.2800	48	72	28.0 x 22.0	3	45	55.5	44	M 36

Dimensionamento gambi per maschi

Taps shank size

Masse des Gewindebohrerschaftes

Dimensions des queues pour tarauds

ACCESSORI PER MACCHINE UTENSILI

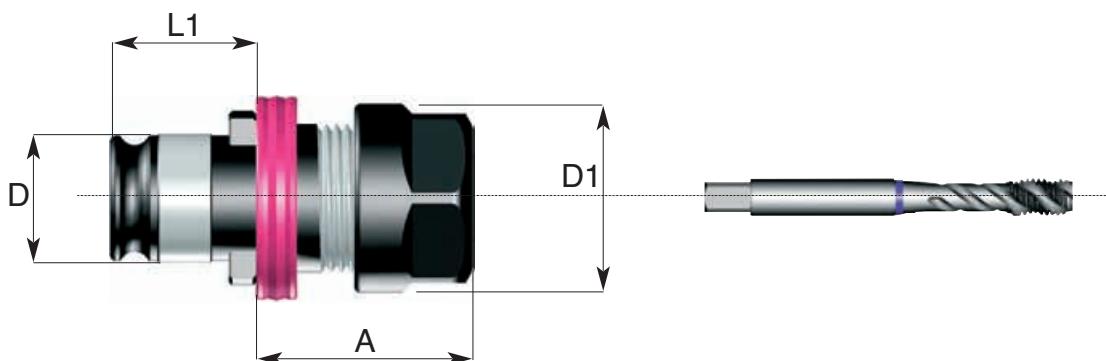
GAMBI MASCHI

12,
20

Gambo	Normale DIN 352	Rinforzato DIN 371	Normale DIN 376	Normale ISO	Rinforzato ISO	Tipo bussola
2.50 X 2.10	M 1.0	M 1.0	M 3.5	-	-	1
2.50 X 2.10	M 1.4	M 1.4	-	-	-	1
2.50 X 2.10	M 1.6	M 1.6	-	-	-	1
2.50 X 2.10	M 1.8	M 1.8	-	-	-	1
2.80 X 2.10	M 2.0	M 2.0	M 4	-	-	1
2.80 X 2.10	M 2.2	M 2.2	-	-	-	1
2.80 X 2.10	M 2.5	M 2.5	-	-	-	1
3.15 X 2.50	-	-	-	M 4.0	M 3.0	1
3.50 X 2.70	M 3.0	M 3.0	M 5.0	-	-	1
3.55 X 2.80	-	-	-	M 4.5	M 3.5	1
4.00 X 3.15	M 3.5	M 3.5	-	M 5.0	M 4.0	1
4.50 X 3.40	M 4.0	M 4.0	M 6.0	-	-	1
5.00 X 4.00	-	-	-	-	M 5.0	1
6.00 X 4.90	M 5.0	M 5.0	-	-	-	1-2
6.00 X 4.90	M 6.0	M 6.0	-	-	-	1-2
6.00 X 4.90	M 8.0	-	M 8.0	-	-	1-2
6.30 X 5.00	-	-	-	M 8.0	M 6.0	1-2
7.00 X 5.50	M 10.0	-	M 10.0	-	-	1-2
8.00 X 6.30	-	M 8.0	-	M 10.0	M 8.0	1-2
9.00 X 7.10	M 12.0	-	M 12.0	M 12.0	-	1-2
10.00 X 8.00	-	M 10	-	-	M 10.0	1-2
11.00 X 9.00	M 14.0	-	M 14.0	-	-	1-2-3
11.20 X 9.00	-	-	-	M 14.0	-	1-2-3
12.00 X 9.00	M 16.0	-	M 16.0	-	-	1-2-3
12.50 X 10.00	-	-	-	M 16.0	-	1-2-3
14.00 X 11.00	M 18.0	-	M 18.0	-	-	2-3
14.00 X 11.20	-	-	-	M 18.0	-	2-3
14.00 X 11.20	-	-	-	M 20.0	-	2-3
16.00 X 12.00	M 20.0	-	M 20.0	-	-	2-3
16.00 X 12.50	-	-	-	M 22.0	-	2-3
18.00 X 14.00	-	-	-	M 24.0	-	2-3
18.00 X 14.50	M 22.0	-	M 22.0	-	-	2-3
18.00 X 14.50	M 24.0	-	M 24.0	-	-	2-3
20.00 X 16.00	M 27.0	-	M 27.0	M 27.0	-	2-3
20.00 X 16.00	-	-	-	M 30.0	-	2-3
22.00 X 18.00	M 30.0	-	M 30.0	-	-	2-3
25.00 X 20.00	M 33.0	-	M 33.0	M 36.0	-	3
28.00 X 22.00	M 36.0	-	M 36.0	-	-	3
32.00 X 24.00	M 39.0	-	M 39.0	-	-	3
32.00 X 24.00	M 42.0	-	M 42.0	-	-	3
36.00 X 29.00	M 45.0	-	M 45.0	-	-	3
36.00 X 29.00	M 48.0	-	M 48.0	-	-	3

ACCESSORI PER MACCHINE UTENSILI


Bussole portamaschio con pinza ER
Quick change tap holder bushes with ER collet
Hülsen für Gewindeschneid-Schnellwechselfutter mit Spannzange ER
Douilles porte-tarauts à changement rapide avec pince ER

ART: 667
12.
21


Codice di ord <i>Code</i>	D	ER	D1	Bussole tipo <i>For collet</i>	L1	A	Per maschi <i>Tap capacity</i>
667.19.0160	19	ER 16	28	1	21.5	34	M 3 - M 14
667.31.0320	31	ER 32	50	2	35	63	M 4 - M 27
667.48.0320	48	ER 32	50	3	55.5	53	M 4 - M 27
667.48.0400	48	ER 40	63	3	55.5	55	M 10 - M 33

Bussole portafiliera a cambio rapido

Quick change dies holder bushes

Hülsen für Schneideisen-Schnellwechselfutter

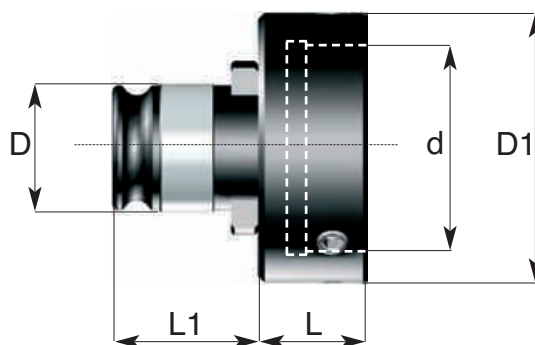
Douilles porte-filières à changement rapide

ACCESSORI PER MACCHINE UTENSILI

DIN 223

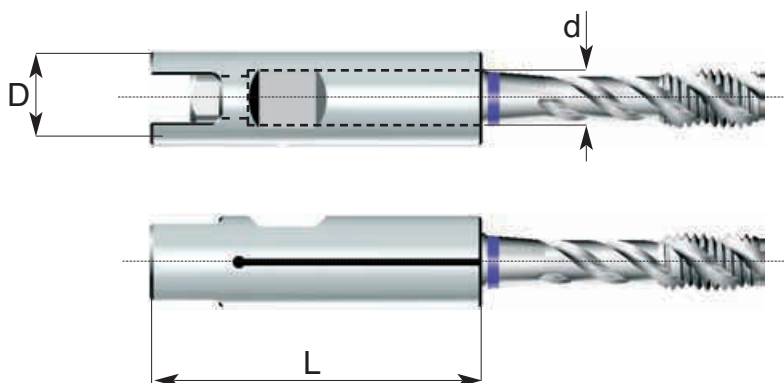


ART: 670



Codice di ord Code	D	D1	D2	Bussole tipo For collet	L	L1	Grandezza Filiera	Per filiere For
670.19.1605	19	25	16	1	21,5	9	16 X 5	M 1 - M 4
670.19.2005	19	30	20	1	21,5	9	20 X 5	M 3 - M 4
670.19.2007	19	30	20	1	21,5	11	20 X 7	M 4.5 - M 6
670.19.2509	19	34	25	1	21,5	14	25 X 9	M 7 - M 9
670.19.3011	19	40	30	1	21,5	16	30 X 11	M 10 - M 11
670.19.3810	19	48	38	1	21,5	15	38 X 10	M 12X1 - M 15X1.5
670.19.3814	19	48	38	1	21,5	19	38 X 14	M 12 - M 14
670.31.2005	31	30	20	3	35	22	20 X 5	M 3 - M 4
670.31.2007	31	30	20	3	35	22	20 X 7	M 4.5 - M 6
670.31.2509	31	38	25	3	35	22	25 X 9	M 7 - M 9
670.31.3011	31	40	30	3	35	22	30 X 11	M 10 - M 11
670.31.3810	31	48	38	3	35	22	38 X 10	M 12X1 - M 15X1.5
670.31.3814	31	48	38	3	35	25	38 X 14	M 12 - M 14
670.31.4514	31	57	45	3	35	29	45 X 14	M 16X1 - M 20X2
670.31.4518	31	57	45	3	35	29	45 X 18	M 16 - M 20

ACCESSORI PER MACCHINE UTENSILI
Bussole portamaschi per mandrini attacco Weldon DIN 1835 B
Tap sleeves for Weldon milling cutter chucks DIN 1835 B
Gewindebohrer-Spannfutter für Weldon Zylinderschäfte DIN 1835 B
Douilles de serrage porte-tarands pour porte-fraises Weldon DIN 1835 B

DIN 1835 B
ART: 675

12.
23

Codice di ord Code	D h6	Per Weldon For Weldon	d H7	d X q	L	Per maschi For tap size
675.08.0250	8	8	2.5	2.5 x 2.1	36	M 1,2 - 1,4 - 1,6 - 1,7 - 1,8
675.08.0280	8	8	2.8	2.8 x 2.1	36	M 2 - 2,2 - 2,3 - 2,5 - 2,6
675.10.0350	10	10	3.5	3.5 x 2.7	40	M 3
675.10.0400	10	10	4.0	4.0 x 3.0	40	M 3.5
675.10.0450	10	10	4.5	4.5 x 3.4	40	M 4
675.12.0600	12	12	6.0	6.0 x 4.9	45	M 4,5 - 5 - 6 - 7 - 8
675.14.0700	14	14	7.0	7.0 x 5.5	45	M 9 - 10
675.14.0800	14	14	8.0	8.0 x 6.2	45	M 11
675.16.0900	16	16	9.0	9.0 x 7.0	48	M 12
675.16.1000	16	16	10.0	10.0 x 8.0	48	M 10
675.18.1100	18	18	11.0	11.0 x 9.0	48	M 14
675.20.1200	20	20	12.0	12.0 x 9.0	50	M 16
675.25.1400	25	25	14.0	14.0 x 11.0	56	M 18
675.25.1600	25	25	16.0	16.0 x 12.0	56	M 20
675.32.1800	32	32	18.0	18.0 x 14.5	60	M 22 - 24
675.32.2000	32	32	20.0	20.0 x 16.0	60	M 27
675.32.2200	32	32	22.0	22.0 x 18.0	60	M 30
675.40.2500	40	40	25.0	25.0 x 20.0	70	M 33
675.40.2800	40	40	28.0	28.0 x 22.0	70	M 36

Anelli di trascinamento frontale DIN 6366 per mandrini portafrese

Front catch rings DIN 6366

Mitnehmerringe DIN 6366

Bagues d'entrainement DIN 6366

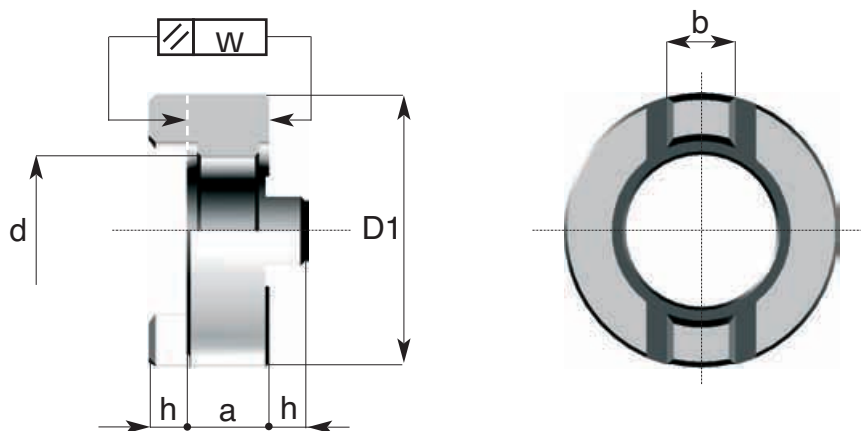
ACCESSORI PER MACCHINE UTENSILI



DIN 6366

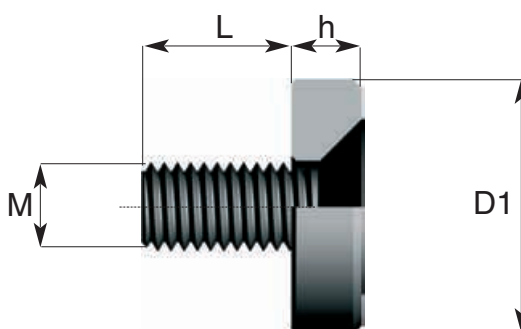
ART: 190

12
24



Codice di ord Code	a Normali	a Alti	d A11	b h11	h IT11	D1 Normali	D1 Alti	w
190.01	10	-	16	8	5	32	-	0.004
190.02	12	-	22	10	5.6	40	45	0.004
190.03	12	-	27	12	6.3	48	55	0.004
190.04	14	-	32	14	7	58	64	0.005
190.05	14	-	40	16	8	70	79	0.005
190.06	16	-	50	18	9	90	-	0.005
190.07	16	-	60	20	10	110	-	0.006
190.08	-	12	16	8	5	32	-	0.004
190.09	-	18	22	10	5.6	40	45	0.004
190.10	-	16	27	12	6.3	48	55	0.004
190.11	-	39	27	12	6.3	48	55	0.004
190.12	-	16	32	14	7	58	64	0.005
190.13	-	18	40	16	8	70	79	0.005

ACCESSORI PER MACCHINE UTENSILI

Vite-rondella per bloccaggio frese con foro cilindrico
Screw and washer for fastening of cutters
Schraube mit Scheibe zum Festspannen des Fräsers
Rondelles et vis pour blocage des fraises à alésage cylindrique
ART: 191
12.
25


Codice di ord Code	M	Per Ø For Ø	D1	L	h
191.01	M8	16	22	20	7
191.02	M10	22	29	20	8
191.03	M12	27	36	25	9
191.04	M16	32	43	30	10
191.05	M20	40	52	35	11
191.06	M24	50	64	40	13
191.07	M24	60	75	45	14

12. ACCESSORI

ACCESSORIES



Tasselli di trascinamento DIN 2079 - 138

Drive keys DIN 2079 - 138

Mitnehmersteine DIN 2079 - 138

Tasseaux d'entrainement DIN 2079 - 138

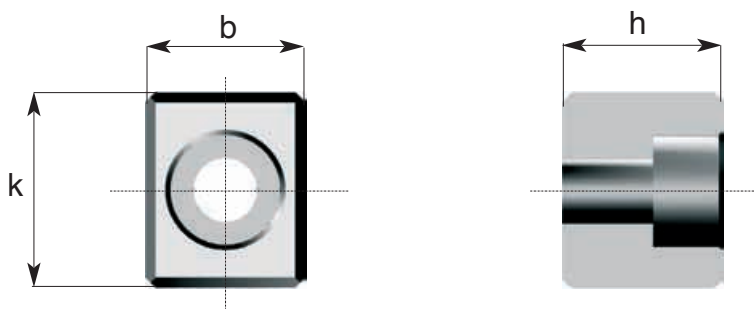
ACCESSORI PER MACCHINE UTENSILI

DIN 2079 - 138

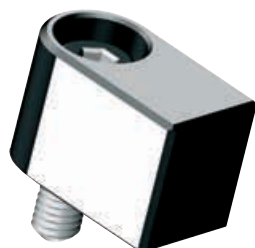
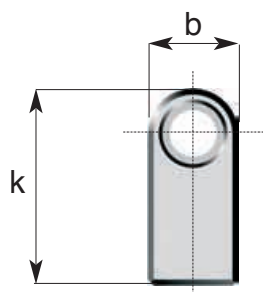


ART: 192

12,
26



Codice di ord Code	Per SK e Ø for SK and Ø	b h11	h	k h11
192.01	SK 30	15.9	16	16.5
192.02	SK 40	15.9	16	19.5
192.45.0190	SK 45	19	19	19.5
192.03	SK 50	25.4	25	26.6
192.04	SK 60	25.4	25	45.5
192.06	16	8	10.5	11
192.07	22	10	11.5	13
192.08	27	12	12.5	15
192.09	32	14	14	17
192.10	40	16	16	19.5
192.11	50	18	18	20
192.12	60	20	20	24

ACCESSORI PER MACCHINE UTENSILI
Tasselli di trascinamento
Drive keys
Mitnehmersteine
Tasseaux d'entrainement

ART: 151
12.
27


Codice di ord <i>Code</i>	Per \varnothing <i>for \varnothing</i>	b h11	h	k
151.101	16	8	10	16.5
151.102	22	10	13	18.5
151.103	27	12	15	22.5
151.104	32	14	15	24.5
151.105	40-50	16	18	26

Bussole di guida DIN 2083 per alberi porta frese

Guide bushes for cutters arbors DIN 2083

Laufbuchsen für Fräsdorne DIN 2083

Douilles de guidage pour arbres porte-fraises DIN 2083

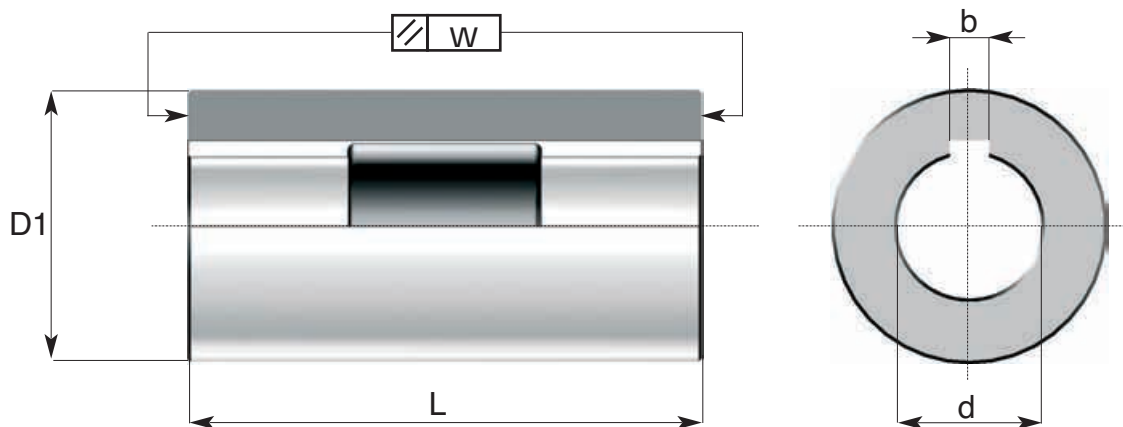
ACCESSORI PER MACCHINE UTENSILI



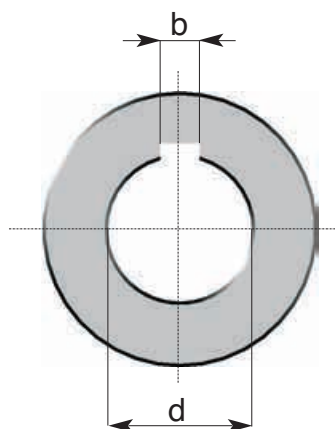
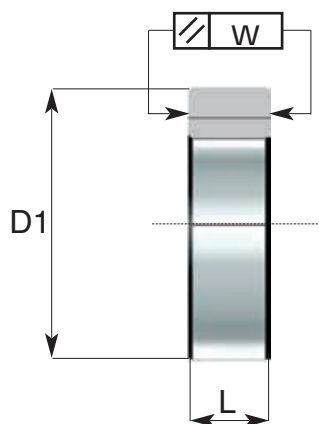
DIN 2083

ART: 193

**12,
28**



Codice di ord Code	d H7	D1 g6	b c11	L ± 0.1	w
193.03	16	42	4	80	0.006
193.04	16	48	4	70	0.007
193.06	16	56	4	80	0.007
193.07	16	56	4	100	0.007
193.09	22	42	6	80	0.006
193.10	22	48	6	70	0.007
193.12	22	50	6	100	0.007
193.13	22	56	6	80	0.007
193.14	22	56	6	100	0.007
193.15	22	70	6	100	0.008
193.16	22	85	6	120	0.008
193.18	27	42	7	80	0.006
193.19	27	48	7	70	0.007
193.21	27	50	7	100	0.007
193.22	27	56	7	80	0.007
193.23	27	56	7	100	0.007
193.24	27	70	7	100	0.008
193.25	27	85	7	120	0.008
193.26	32	48	8	70	0.007
193.28	32	50	8	100	0.007
193.29	32	56	8	80	0.007
193.30	32	56	8	100	0.007
193.31	32	70	8	100	0.008
193.32	32	85	8	120	0.008
193.33	40	48	10	70	0.007
193.35	40	50	10	100	0.007
193.36	40	56	10	80	0.007
193.37	40	56	10	100	0.007
193.38	40	70	10	100	0.008
193.39	40	85	10	120	0.008
193.40	40	110	10	140	0.008
193.41	50	70	12	100	0.008
193.42	50	85	12	120	0.008
193.44	60	70	14	100	0.011
193.45	60	85	14	120	0.011


DIN 2084
ART: 194

12.
29

Codice di ord Code	d C11	D1 g6	b c11	L ± 0.1	w
194.01	16	27	4	2	0.004
194.02	16	27	4	3	0.004
194.03	16	27	4	4	0.004
194.04	16	27	4	5	0.004
194.05	16	27	4	6	0.004
194.06	16	27	4	10	0.004
194.07	16	27	4	20	0.004
194.08	16	27	4	30	0.004
194.09	22	34	6	2	0.004
194.10	22	34	6	3	0.004
194.11	22	34	6	4	0.004
194.12	22	34	6	5	0.004
194.13	22	34	6	6	0.004
194.14	22	34	6	10	0.004
194.15	22	34	6	20	0.004
194.16	22	34	6	30	0.004
194.17	22	34	6	60	0.004
194.18	27	41	7	2	0.004
194.19	27	41	7	3	0.004
194.20	27	41	7	4	0.004
194.21	27	41	7	5	0.004
194.22	27	41	7	6	0.004
194.23	27	41	7	10	0.004
194.24	27	41	7	20	0.004
194.25	27	41	7	30	0.004
194.26	27	41	7	60	0.004
194.27	27	41	7	100	0.004

Codice di ord Code	d C11	D1 g6	b c11	L ± 0.1	w
194.28	32	47	8	2	0.004
194.29	32	47	8	3	0.004
194.30	32	47	8	4	0.004
194.31	32	47	8	5	0.004
194.32	32	47	8	6	0.004
194.33	32	47	8	10	0.004
194.34	32	47	8	20	0.004
194.35	32	47	8	30	0.004
194.36	32	47	8	60	0.004
194.37	32	47	8	100	0.004
194.38	40	55	10	2	0.004
194.39	40	55	10	3	0.004
194.40	40	55	10	4	0.004
194.41	40	55	10	5	0.004
194.42	40	55	10	6	0.004
194.43	40	55	10	10	0.004
194.44	40	55	10	20	0.004
194.45	40	55	10	30	0.004
194.46	40	55	10	60	0.004
194.47	40	55	10	100	0.004
194.48	50	69	12	2	0.005
194.49	50	69	12	3	0.005
194.50	50	69	12	6	0.005
194.51	50	69	12	10	0.005
194.52	50	69	12	20	0.005
194.53	50	69	12	30	0.005
194.54	50	69	12	60	0.005
194.55	50	69	12	100	0.005
194.56	60	84	14	6	0.005
194.57	60	84	14	10	0.005
194.58	60	84	14	20	0.005
194.59	60	84	14	30	0.005
194.60	60	84	14	60	0.005
194.61	60	84	14	100	0.005

Anelli per alberi portafrese forma "A" tranciati DIN 2084

Sheared arbor rings DIN 2084

Fräsdornringe geschnitten DIN 2084

Bagues découpées pour arbres porte-fraises DIN 2084

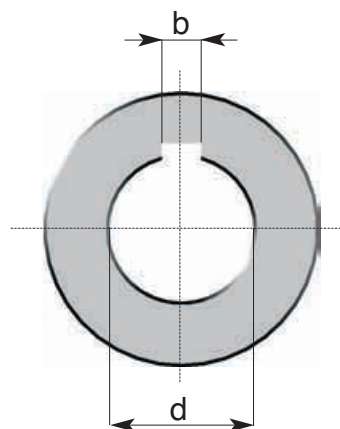
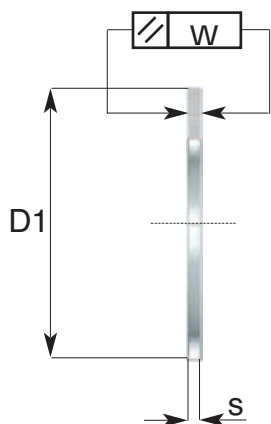
ACCESSORI PER MACCHINE UTENSILI



DIN 2084

ART: 195

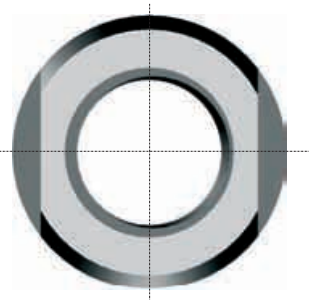
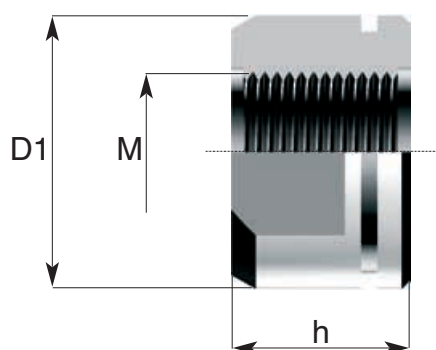
**12,
30**



Codice di ord Code	d C11	D1 g6	b c11	s	w
195.01	16	25	4	0.03	0.004
195.02	16	25	4	0.04	0.004
195.03	16	25	4	0.05	0.004
195.04	16	25	4	0.1	0.004
195.05	16	25	4	0.2	0.004
195.06	16	25	4	0.3	0.004
195.07	16	25	4	0.5	0.004
195.08	16	25	4	0.6	0.004
195.09	16	25	4	1	0.004
195.10	16	25	4	1.5	0.004
195.11	22	33	6	0.03	0.004
195.12	22	33	6	0.04	0.004
195.13	22	33	6	0.05	0.004
195.14	22	33	6	0.1	0.004
195.15	22	33	6	0.2	0.004
195.16	22	33	6	0.3	0.004
195.17	22	33	6	0.5	0.004
195.18	22	33	6	0.6	0.004
195.19	22	33	6	1	0.004
195.20	22	33	6	1.5	0.004
195.21	27	39	7	0.03	0.004
195.22	27	39	7	0.04	0.004
195.23	27	39	7	0.05	0.004
195.24	27	39	7	0.1	0.004
195.25	27	39	7	0.2	0.004
195.26	27	39	7	0.3	0.004
195.27	27	39	7	0.5	0.004
195.28	27	39	7	0.6	0.004
195.29	27	39	7	1	0.004
195.30	27	39	7	1.5	0.004

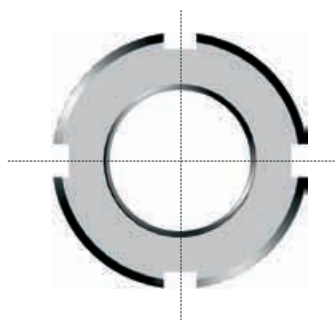
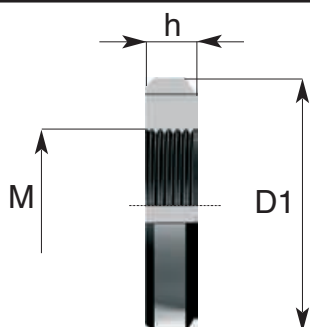
Codice di ord Code	d C11	D1 g6	b c11	s	w
195.31	32	45	8	0.03	0.004
195.32	32	45	8	0.03	0.004
195.33	32	45	8	0.05	0.004
195.34	32	45	8	0.1	0.004
195.35	32	45	8	0.2	0.004
195.36	32	45	8	0.3	0.004
195.37	32	45	8	0.5	0.004
195.38	32	45	8	0.6	0.004
195.39	32	45	8	1	0.004
195.40	32	45	8	1.5	0.004
195.41	40	54	10	0.03	0.004
195.42	40	54	10	0.04	0.004
195.43	40	54	10	0.05	0.004
195.44	40	54	10	0.1	0.004
195.45	40	54	10	0.2	0.004
195.46	40	54	10	0.3	0.004
195.47	40	54	10	0.5	0.004
195.48	40	54	10	0.6	0.004
195.49	40	54	10	1	0.004
195.50	40	54	10	1.5	0.004
195.51	50	67	12	0.05	0.004
195.52	50	67	12	0.1	0.004
195.53	50	67	12	0.2	0.004
195.54	50	67	12	0.3	0.004
195.55	50	67	12	0.5	0.004
195.56	50	67	12	0.6	0.004
195.57	50	67	12	0.1	0.004
195.58	50	67	12	1.5	0.004
195.59	60	83	14	0.05	0.004
195.60	60	83	14	0.1	0.004
195.61	60	83	14	0.2	0.004
195.62	60	83	14	0.3	0.004
195.63	60	83	14	0.5	0.004
195.64	60	83	14	0.6	0.004
195.65	60	83	14	1	0.004
195.66	60	83	14	1.5	0.004

ACCESSORI PER MACCHINE UTENSILI

Dadi filettati terminali DIN 2082
Treaded capnuts DIN 2082
Muttern für Fräserdorne mit Linksgewinde DIN 2082
Écrous d'extrémités filetés DIN 2082
DIN 2082
ART: 197

12.
31

Codice di ord Code	Per Ø For Ø	D1	h	M
197.01	16	26	16	M 14 X 1.5 sin.
197.02	22	34	22	M 20 X 1.5 sin.
197.03	27	40	28	M 24 X 1.5 sin.
197.04	32	46	32	M 30 X 1.5 sin.
197.05	40	55	40	M 36 X 2 sin.
197.06	50	68	46	M 42 X 2 sin.
197.07	60	80	56	M 52 X 2 sin.

Ghiera di estrazione per riduzioni a cono Morse ART. 286
Ejector ring for adaptors sleeves with Morse cone ART. 286
Mutter für Reduzierhülsen mit Morsekegel ART. 286
Manchon d'extraction pour douilles de réduction à cône Morse ART. 286

ART: 297


Codice di ord Code	M	h	D1	per riduzioni a Cono Morse For MT
297.01	M22 X 1.5	8	38	Morse 2
297.02	M27 X 1.5	9	46	Morse 3
297.03	M35 X 1.5	10.5	55	Morse 4
297.04	M48 X 1.5	12	69	Morse 5
297.05	M65 X 1.5	15	90	Morse 6

Anelli di trascinamento per mandrini porta alesatori a manicotto ART. 340

Catch rings for shell reamer chucks ART. 340

Mitnehmerringe für ART. 340

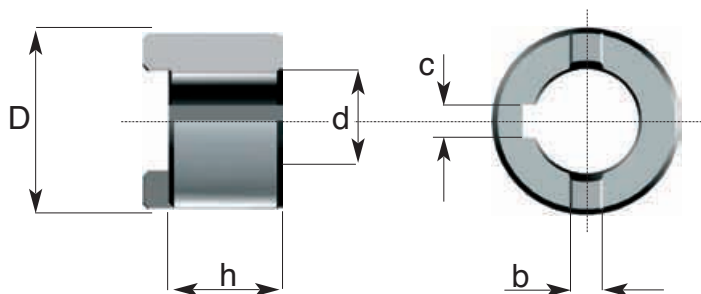
Bagues d'entrainement pour mandrins pour alesoir creux ART.340

ACCESSORI PER MACCHINE UTENSILI



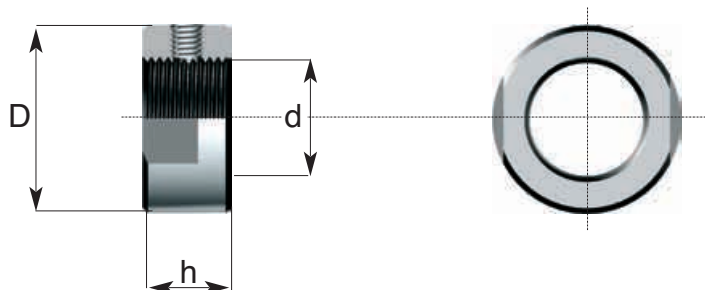
ART: 346

12,
32



Codice di ord Code	d h6	b h11	C	D	h	Per mandrini For chucks
346.01	10	4	3	18	14	340.01
346.02	13	4	4	23	18	340.02
346.03	16	5	4	28	20	340.03
346.04	19	6	5	34	22	340.04
346.05	22	7	6	37.5	24	340.05
346.06	27	8	7	44.5	28	340.06
346.07	32	10	8	51	30	340.07-08
346.08	40	12	10	62	35	340.09-10
346.09	50	14	12	74	35	340.11

ACCESSORI PER MACCHINE UTENSILI
Ghiere di registrazione per mandrini porta alesatori a manicotto ART. 340
Set rings for shell reamer chucks ART. 340
Abdrückmutter für ART. 340
Manchons de réglage pour mandrins pour alesoir creux ART.340

ART: 347
12.
33


Codice di ord <i>Code</i>	dxp	D	h	Per mandrini For chucks
347.01	M 12 x 1,25	18	12	340.01
347.02	M 16 x 1,5	23	14	340.02
347.03	M 20 x 1,5	28	15	340.03
347.04	M 22 x 1,5	34	16	340.04
347.05	M 26 x 1,5	37,5	18	340.05
347.06	M 30 x 1,5	44,5	22	340.06
347.07	M 36 x 1,5	51	24	340.07-08
347.08	M 45 x 1,5	62	25	340.09-10
347.09	M 56 x 1,5	74	25	340.11

Boccole di riduzione per mandrini a FORTE SERRAGGIO ART. 603

Intermediate sleeves for high clamping chucks ART. 603

Reduzierhulsen für Kraftspannfutter ART. 603

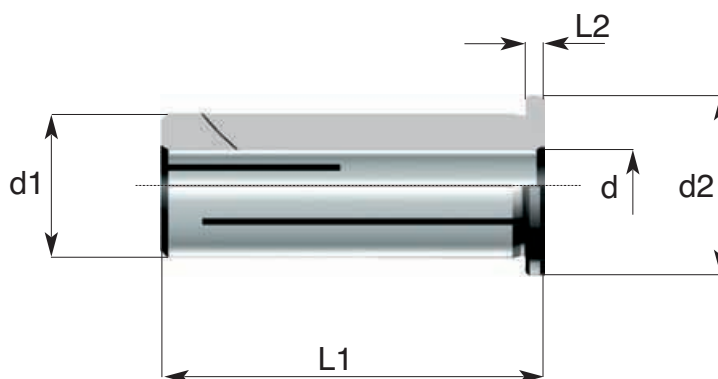
Douilles de réduction pour mandrins à fort serrage ART. 603

ACCESSORI PER MACCHINE UTENSILI



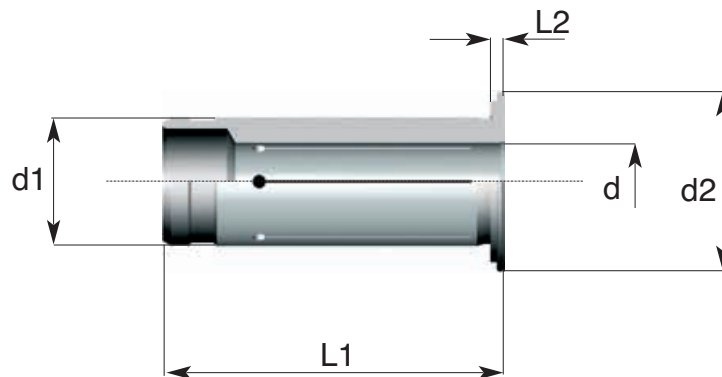
ART: 239

**12,
34**



Codice di ord Code	d h6	d 1	d2	L1	L2
239.20.0060	6	20	25	53	2.5
239.20.0080	8	20	25	53	2.5
239.20.0100	10	20	25	53	2.5
239.20.0120	12	20	25	53	2.5
239.20.0160	16	20	25	53	2.5
239.32.0060	6	32	38	54	3
239.32.0080	8	32	38	54	3
239.32.0100	10	32	38	54	3
239.32.0120	12	32	38	54	3
239.32.0160	16	32	38	54	3
239.32.0200	20	32	38	54	3
239.32.0250	25	32	38	54	3

ACCESSORI PER MACCHINE UTENSILI

Boccole di riduzione per mandrini a chiusura idraulica HYDRO-DELTA
Intermediate sleeves for hydraulic clamping chucks HYDRO DELTA
Reduzierhulsen für Dehnspannfutter HYDRO DELTA
Douilles de réduction pour mandrins expansibles HYDRO DELTA
ART:207
12.
35


Codice di ord <i>Code</i>	d h6	d 1	d2	L1	L2
207.12.0030	3	12	17	50	2
207.12.0040	4	12	17	50	2
207.12.0050	5	12	17	50	2
207.12.0060	6	12	17	50	2
207.12.0080	8	12	17	50	2
207.20.0030	3	20	28	53	2
207.20.0040	4	20	28	53	2
207.20.0050	5	20	28	53	2
207.20.0060	6	20	28	53	2
207.20.0080	8	20	28	53	2
207.20.0100	10	20	28	53	2
207.20.0120	12	20	28	53	2
207.20.0140	14	20	28	53	2
207.20.0160	16	20	28	53	2
207.32.0030	3	32	40	54	3
207.32.0040	4	32	40	54	3
207.32.0050	5	32	40	54	3
207.32.0060	6	32	40	54	3
207.32.0080	8	32	40	54	3
207.32.0100	10	32	40	54	3
207.32.0120	12	32	40	54	3
207.32.0140	14	32	40	54	3
207.32.0160	16	32	40	54	3

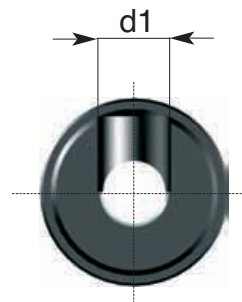
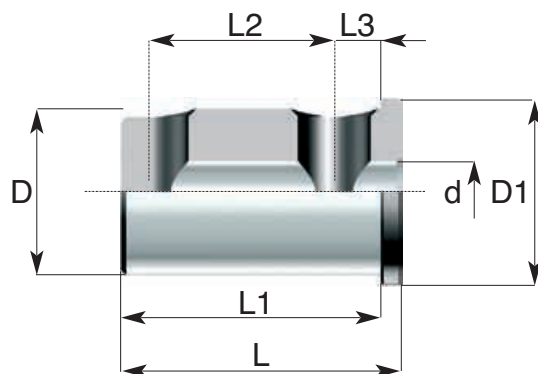
Bussole di riduzione
Reduction sleeves
Reduzierhulsen
Douilles de réduction

ACCESSORI PER MACCHINE UTENSILI



ART: 235

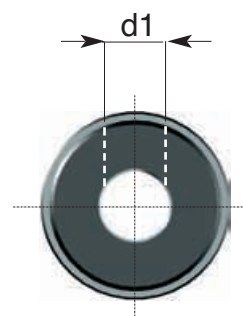
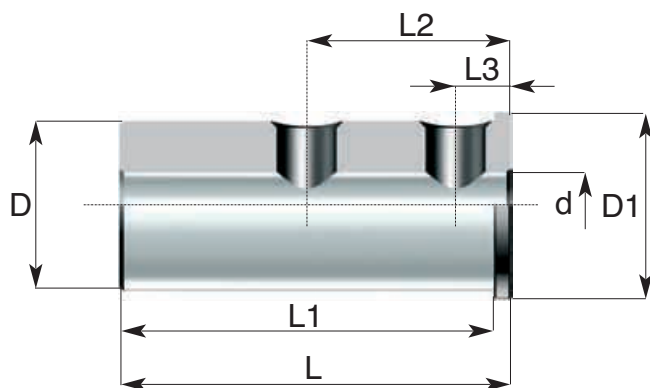
**12,
36**



Codice di ord Code	D h6	d H6	D1	L	L1	L2	L3	d1
235.32.0080	32	8	36	54	50	35	9	14
235.32.0100	32	10	36	54	50	35	9	14
235.32.0120	32	12	36	54	50	35	9	14
235.32.0160	32	16	36	54	50	35	9	14
235.32.0200	32	20	36	54	50	35	9	14
235.32.0250	32	25	36	54	50	35	9	14
235.40.0080	40	8	44	54	50	35	9	14
235.40.0100	40	10	44	54	50	35	9	14
235.40.0120	40	12	44	54	50	35	9	14
235.40.0160	40	16	44	54	50	35	9	14
235.40.0200	40	20	44	54	50	35	9	14
235.40.0250	40	25	44	54	50	35	9	14
235.40.0320	40	32	44	54	50	35	9	14

ACCESSORI PER MACCHINE UTENSILI

Bussole di riduzione
 Reduction sleeves
 Reduzierhulsen
 Douilles de réduction


ART: 236

12.
37

Codice di ord Code	D h6	d H6	D1	L	L1	L2	L3	d1
236.32.0080	32	8	36	92	88	44	9	14
236.32.0100	32	10	36	92	88	44	9	14
236.32.0120	32	12	36	92	88	44	9	14
236.32.0160	32	16	36	92	88	44	9	14
236.32.0200	32	20	36	92	88	44	9	14
236.32.0250	32	25	36	92	88	44	9	14
236.40.0080	40	8	44	92	88	44	9	14
236.40.0100	40	10	44	92	88	44	9	14
236.40.0120	40	12	44	92	88	44	9	14
236.40.0160	40	16	44	92	88	44	9	14
236.40.0200	40	20	44	92	88	44	9	14
236.40.0250	40	25	44	92	88	44	9	14
236.40.0320	40	32	44	92	88	44	9	14
236.50.0080	50	8	54	111	107	45	9	14
236.50.0100	50	10	54	111	107	45	9	14
236.50.0120	50	12	54	111	107	45	9	14
236.50.0160	50	16	54	111	107	45	9	14
236.50.0200	50	20	54	111	107	45	9	14
236.50.0250	50	25	54	111	107	45	9	14
236.50.0320	50	32	54	111	107	45	9	14
236.50.0400	50	40	54	111	107	45	9	14

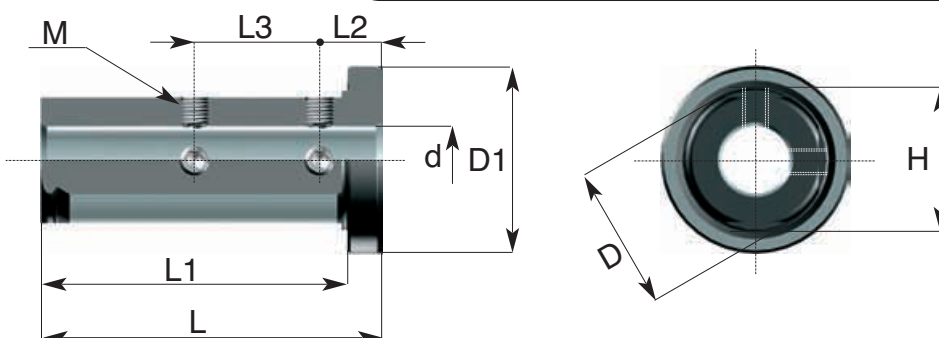
Bussole di riduzione
Reduction sleeves
Reduzierhulsen
Douilles de réduction

ACCESSORI PER MACCHINE UTENSILI



ART: 237.25

12,
38

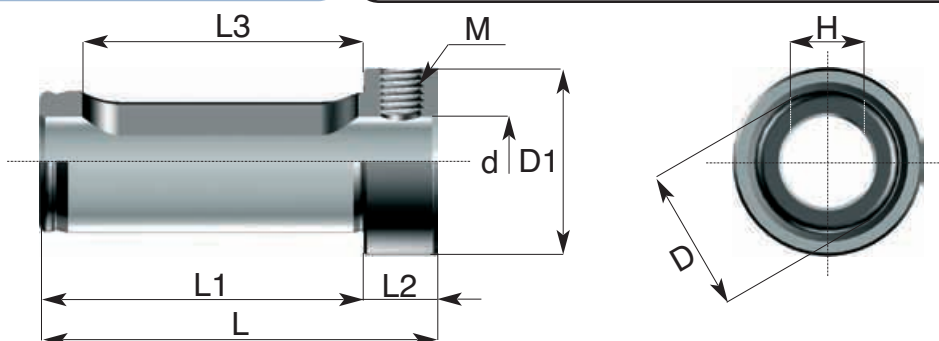


Codice di ord Code	D h6	d H6	D1	L	L1	L2	L3	M	H
237.25.0060	25	6	33	60	57	11	22	M5	22
237.25.0080	25	8	33	60	57	11	22	M5	22
237.25.0100	25	10	33	60	57	11	22	M5	22
237.25.0120	25	12	33	60	57	11	22	M5	22

Bussole di riduzione
Reduction sleeves
Reduzierhulsen
Douilles de réduction



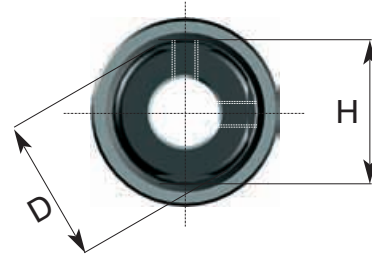
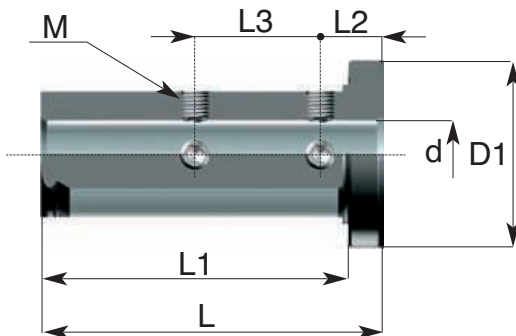
ART: 237.25



Codice di ord Code	D h6	d H6	D1	L	L1	L2	L3	M	H
237.25.0140	25	14	33	70	57	13	48.5	M8	13
237.25.0160	25	16	33	70	57	13	48.5	M8	13
237.25.0180	25	18	33	70	57	13	48.5	M8	13
237.25.0200	25	20	33	70	57	13	48.5	M8	13

ACCESSORI PER MACCHINE UTENSILI

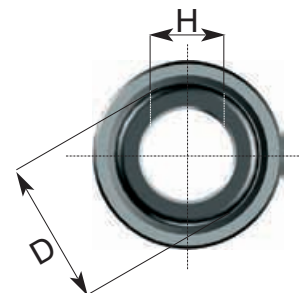
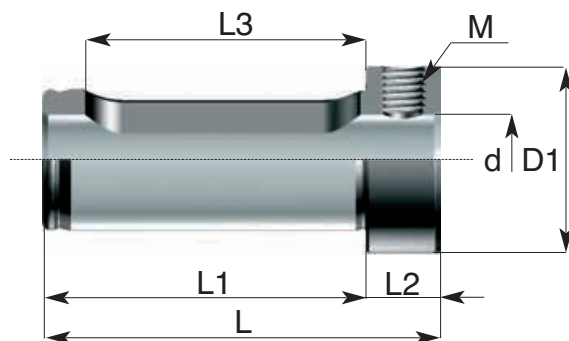
Bussole di riduzione
Reduction sleeves
Reduzierhulsen
Douilles de réduction


ART: 237.32

12.
39

Codice di ord <i>Code</i>	D h6	d H6	D1	L	L1	L2	L3	M	H
237.32.0060	32	6	39	60	54	11	22	M5	29.5
237.32.0080	32	8	39	70	62	15	32	M6	29.5
237.32.0100	32	10	39	70	62	15	32	M6	29.5
237.32.0120	32	12	39	70	62	15	32	M6	29.5
237.32.0140	32	14	39	70	62	15	32	M6	29.5
237.32.0160	32	16	39	70	62	15	32	M6	29.5
237.32.0180	32	18	39	70	62	15	32	M6	29.5
237.32.0200	32	20	39	70	62	15	32	M6	29.5



Bussole di riduzione
Reduction sleeves
Reduzierhulsen
Douilles de réduction

ART:237.32


Codice di ord <i>Code</i>	D h6	d H6	D1	L	L1	L2	L3	M	H
237.32.0250	32	25	39	80	65	15	58	M6	13

12. ACCESSORI

ACCESSORIES



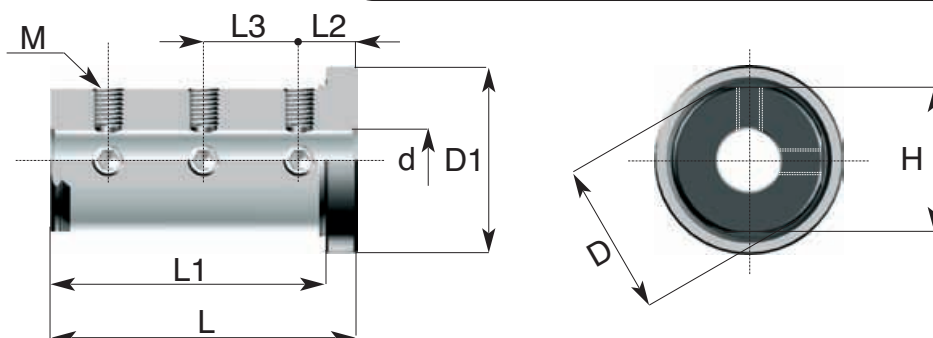
Bussole di riduzione
Reduction sleeves
Reduzierhulsen
Douilles de réduction

ACCESSORI PER MACCHINE UTENSILI



ART: 237.40

12,
40



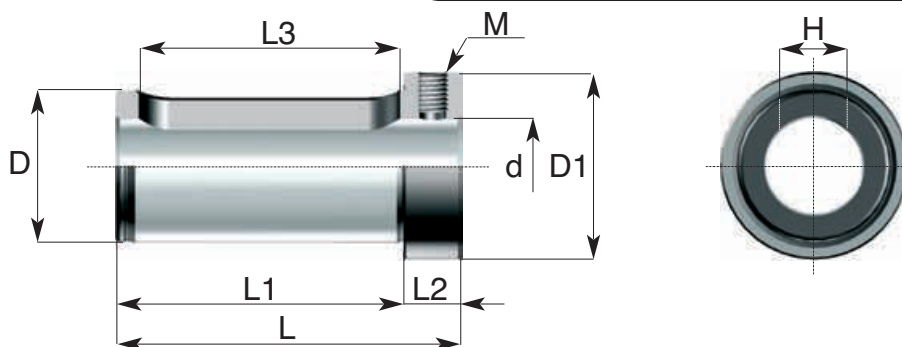
Codice di ord Code	D h6	d H6	D1	L	L1	L2	L3	M	H
237.40.0060	40	6	49	60	54	11	22	M5	37.5
237.40.0080	40	8	49	80	72	15	25	M8	37.5
237.40.0100	40	10	49	80	72	15	25	M8	37.5
237.40.0120	40	12	49	80	72	15	25	M8	37.5
237.40.0140	40	14	49	80	72	15	25	M8	37.5
237.40.0160	40	16	49	80	72	15	25	M8	37.5
237.40.0180	40	18	49	80	72	15	25	M8	37.5
237.40.0200	40	20	49	80	72	15	25	M8	35.7
237.40.0250	40	25	49	80	72	15	25	M8	37.5

Bussole di riduzione
Reduction sleeves
Reduzierhulsen
Douilles de réduction



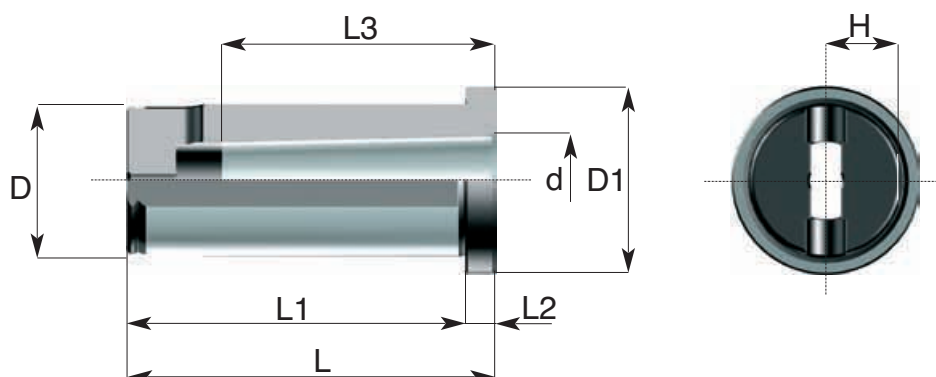
ART: 237.40

s



Codice di ord Code	D h6	d H6	D1	L	L1	L2	L3	M	H
237.40.0320	40	32	49	90	75	15	68	M8	16.5

ACCESSORI PER MACCHINE UTENSILI
Bussole di riduzione a cono Morse interno DIN 2185
Reduction sleeves to Morse cone DIN 2185
Reduzierhulsen mit Morsekegel DIN 2185
Douilles de réduction à cône Morse DIN 2185

ART: 238

12.
41

Codice di ord Code	D h6	CM	d	D1	L	L1	L2	L3	H
238.25.0100	25	Morse 1	12.065	33	65	59	6	47	11
238.25.0200	25	Morse 2	17.780	33	78	70	8	58	11
238.32.0100	32	Morse 1	12.065	39	65	59	6	47	14.75
238.32.0200	32	Morse 2	17.780	39	78	70	8	58	14.75
238.32.0300	32	Morse 3	23.825	39	97	89	8	72	14.75
238.40.0100	40	Morse 1	12.065	49	65	59	6	47	18.75
238.40.0200	40	Morse 2	17.780	49	78	70	8	58	18.75
238.40.0300	40	Morse 3	23.825	49	97	89	8	72	18.75
238.40.0400	40	Morse 4	31.267	49	120	112	8	92	18.75

12. ACCESSORI

ACCESSORIES



Adduttore refrigerante per HSK

Coolant pipe for HSK

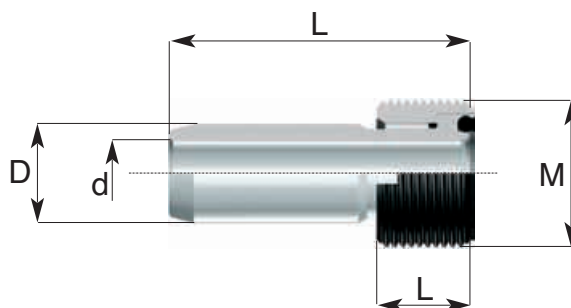
Kühlmittelrohre für HSK

Adducteur réfrigérant pour HSK

ACCESSORI PER MACCHINE UTENSILI



ART: HSKA



Codice di ord Code	D	M	d	L	L1	L2
HSKA.32.0100	6	M10 X 1	3,5	25,7	5,5	HSKA32 - HSKE25 - HSKE32
HSKA.40.0120	8	M12 X 1	5	29	7,5	HSKA40 - HSKE40 - HSKF50
HSKA.50.0160	10	M16 X 1	6,4	33	10	HSKA50 - HSKE50 - HSKF63
HSKA.63.0180	12	M18 X 1	8	36,2	11,5	HSKA63 - HSKE63
HSKA.80.0200	14	M20 X 1,5	10	39,6	13,5	HSKA80
HSKA.100.0240	16	M24 X 1,5	12	43,6	15,5	HSKA100

Chiave per il montaggio del tubetto per l'adduzione del refrigerante

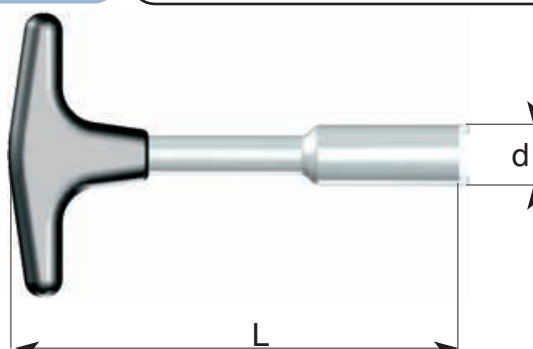
Key for the setting up of the coolant pipe

Schlüssel für Kühlmittelrohre

Clé pour le montage de l'adducteur réfrigérant



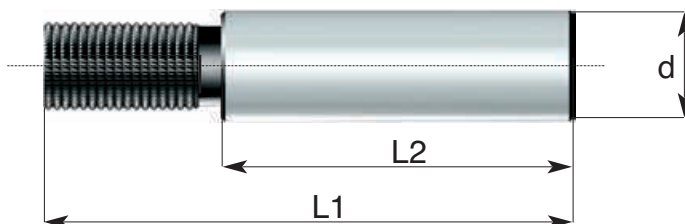
ART: CH.HSK



Codice di ord Code	D	d H6	D1
CH.HSK.0320	32	9	110
CH.HSK.0400	40	11	110
CH.HSK.0500	50	15	120
CH.HSK.0630	63	17	120
CH.HSK.0800	80	18,5	130
CH.HSK.1000	100	22	140

ACCESSORI PER MACCHINE UTENSILI

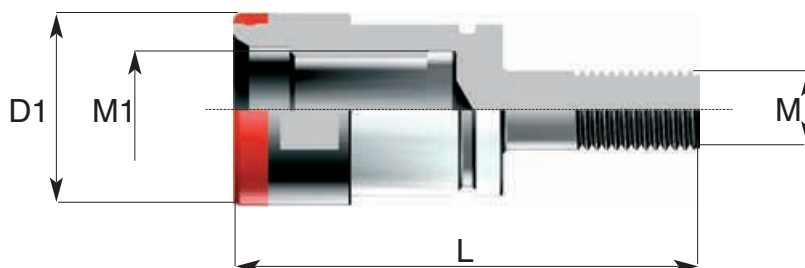

Spina di controllo per mandrini HYDRO DELTA
Test shaft for HYDRO DELTA hydraulic clamping chuck
Kontrollhorn für Dehnspannfutter HYDRO DELTA
Goujon de contrôle pour mandrins expansibles HYDRO DELTA

ART: 207.SP

12.
43

Codice di ord <i>Code</i>	d	L1	L2
207.SP.0060	6	100	60
207.SP.0080	8	100	60
207.SP.0100	10	100	60
207.SP.0120	12	100	60
207.SP.0140	14	100	60
207.SP.0160	16	100	80
207.SP.0200	20	100	80
207.SP.0250	25	100	80
207.SP.0320	32	100	80

Codoli filettati per riduzioni ISO art. 250

Threaded locking shanks for ISO adaptors ART. 250
Gewindeschäfte für Reduzierhülsen ISO ART. 250
Queues filetées de blocage pour réducteurs ISO ART. 250


CODOLI
ART: 296


Codice di ord <i>Code</i>	M	M1	D1	L
296.01	M16	M12	25	70
296.20.0120	M20	M12	32	92
296.20.0160	M20	M16	32	83
296.02	M24	M12	39	107
296.03	M24	M16	39	95
296.24.0200	M24	M20	39	95
296.04	M30	M24	59.5	150

- 13.2**
 - Attrezzi smontaconi
Tightening fixture

- 13.2**
 - Attrezzi smontaconi
Tightening fixture

- 13.3**
 - Attrezzi smontaconi
Tightening fixture

- 13.3**
 - Attrezzi smontaconi
Tightening fixture

- 13.3**
 - Attrezzi smontaconi
Tightening fixture

- 13.4**
 - Boccia portaconi

- 13.4**
 - Unità da banco
Bench unities

- 13.5**
 - Magazzini portaconi
Tools stores



SMONTACONI
Attrezzi smontaconi e
magazzini
Tightening fixture

13

 **delta**

13. ATTREZZI SMONTACONI MOUNTING FIXTURES



ACCESSORI PER MACCHINE UTENSILI

Smontaconi a 2 posizioni

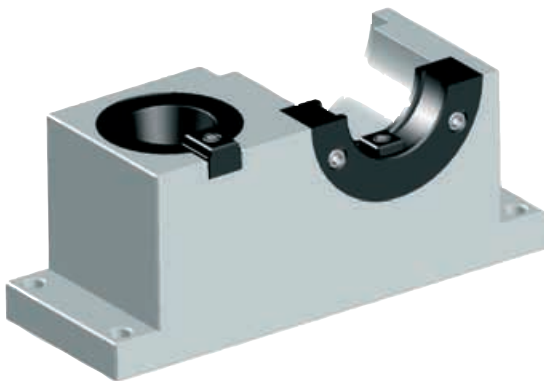
Double position mounting fixture

Doppelstellung Montagevorrichtung

Support d'assemblage à 2 positions

ART: Smontaconi a 2 posizioni

13.
2



Codice di ord. Code	Tipo Type	L x P x H
SCD.0300	ISO 30 - DIN 2080	350 X 135 X 155
SCD.0400	ISO 40 - DIN 2080	350 X 135 X 155
SCD.0500	ISO 50 - DIN 2080	350 X 135 X 155
SCD.0300	ISO 30 - DIN 69871	350 X 135 X 155
SCD.001.0400	ISO 40 - DIN 69871	350 X 135 X 155
SCD.001.0500	ISO 50 - DIN 69871	350 X 135 X 155
SCD.BT.0300	BT 30 - MAS 403 BT	350 X 135 X 155
SCD.BT.0400	BT 40 - MAS 403 BT	350 X 135 X 155
SCD.BT.0500	BT 50 - MAS 403 BT	350 X 135 X 155
SCD.HSKAC.0320	HSK 32 - DIN 69893 A + C	350 X 135 X 155
SCD.HSKAC.0400	HSK 40 - DIN 69893 A + C	350 X 135 X 155
SCD.HSKAC.0500	HSK 50 - DIN 69893 A + C	350 X 135 X 155
SCD.HSKAC.0630	HSK 63 - DIN 69893 A + C	350 X 135 X 155
SCD.HSKAC.1000	HSK 100 - DIN 69893 A + C	350 X 135 X 155
SCD.HSKE.0400	HSK 40 - DIN 69893 E	350 X 135 X 155
SCD.HSKEF.0500	HSK 50 - DIN 69893 E + F	350 X 135 X 155
SCD.HSKEF.0630	HSK 63 - DIN 69893 E + F	350 X 135 X 155
SCD.VDI.0200	VDI 20 - DIN 69880	350 X 135 X 155
SCD.VDI.0300	VDI 30 - DIN 69880	350 X 135 X 155
SCD.VDI.0400	VDI 40 - DIN 69880	350 X 135 X 155
SCD.VDI.0500	VDI 50 - DIN 69880	350 X 135 X 155

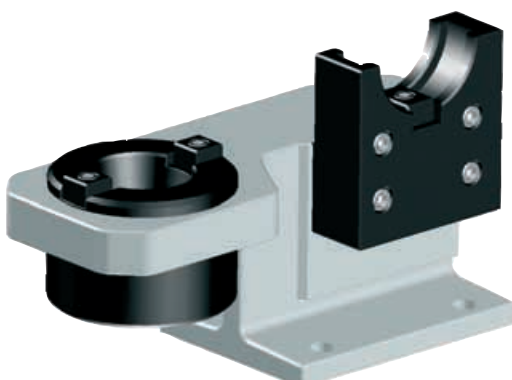
Smontaconi a 2 posizioni

Double position mounting fixture

Doppelstellung Montagevorrichtung

Support d'assemblage à 2 positions

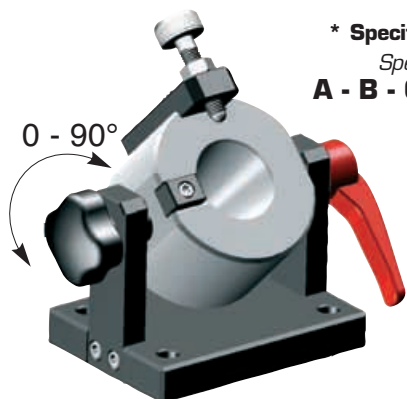
ART: Smontaconi a 2 posizioni tipo alleggerito / relieved type



Codice di ord. Code	Tipo Type	L x P x H
SCDA.ISO.0300	ISO 30 - DIN 69871	180 X 80 X 130
SCDA.BT.0300	BT 30 - MAS 403 BT	180 X 80 X 130
SCDA.ISO.0400	ISO 30 - DIN 69871	180 X 80 X 130
SCDA.BT.0400	BT 40 - MAS 403 BT1	180 X 80 X 130
SCDA.ISO.0500	ISO 50 - DIN 69871	180 X 80 X 130
SCDA.BT.0500	BT 50 - MAS 403 BT	180 X 80 X 130

Smontaconi orientabile universale
 Universal indexable mounting fixture
 Verstellbare Unviversalmontagehilfe
 Dispositif d'assemblage universel orientable

ART: Smontaconi universale orientabile / indexable



* Specificare forma:
 Specify form:
A - B - C - D - E - F

Codice di ord. Code	Tipo Type	L x P x H
SC.ISO.0300	ISO - 30	135 X 100 X 140
SC.ISO.0400	ISO - 40	135 X 100 X 140
SC.ISO.0450	ISO - 45	135 X 100 X 140
SC.ISO.0500	ISO - 50	135 X 100 X 140
SC.HSK.0250	HSK - 25 *	135 X 100 X 140
SC.HSK.0320	HSK - 32 *	135 X 100 X 140
SC.HSK.0400	HSK - 40 *	135 X 100 X 140
SC.HSK.0500	HSK - 50 *	135 X 100 X 140
SC.HSK.0630	HSK - 63 *	135 X 100 X 140
SC.HSK.0800	HSK - 80 *	135 X 100 X 140
SC.HSK.1000	HSK - 100 *	135 X 100 X 140

13.
3

Boccole di montaggio
 Tooling clamber
 Montageblock
 Douille support d'assemblage

ART: Boccole di montaggio in acciaio / in steel



Codice di ord. Code	Tipo Type	H
BMS.ISO.0300	ISO - 30	70
BMS.ISO.0400	ISO - 40	95
BMS.ISO.0500	ISO - 50	130

Codice di ord. Code	Tipo Type	H
BMA.ISO.0300	ISO - 30	50
BMA.ISO.0400	ISO - 40	72
BMA.ISO.0500	ISO - 50	105

13. ATTREZZI SMONTACONI MOUNTING FIXTURES



Boccola portaconi
Tooling holder
Spannfutterhalter
Douille porte-cônes

ACCESSORI PER MACCHINE UTENSILI

ART: Boccola portaconi

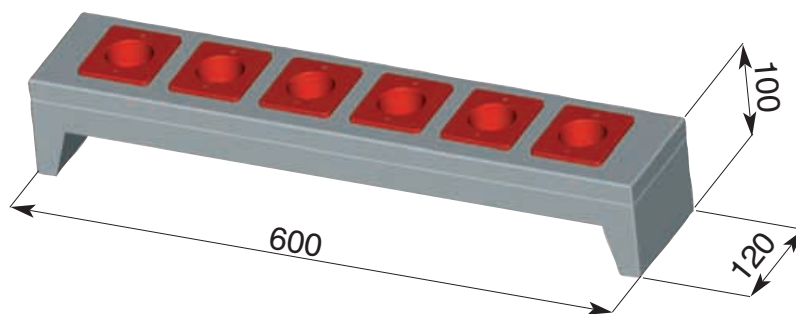
13.
4



Codice di ord. Code	Tipo Type
BP.ISO.0300	ISO - 30
BP.ISO.0400	ISO - 40
BP.ISO.0450	ISO - 45
BP.ISO.0500	ISO - 50
BP.HSK.0500	HSK - 50
BP.HSK.0630	HSK - 63
BP.CL.0320	Ø 32
BP.CL.0400	Ø 40
BP.CL.0500	Ø 50

Unità da banco
Bench units
Werkbankeinheit
Unité pour banc

ART: Unità da banco

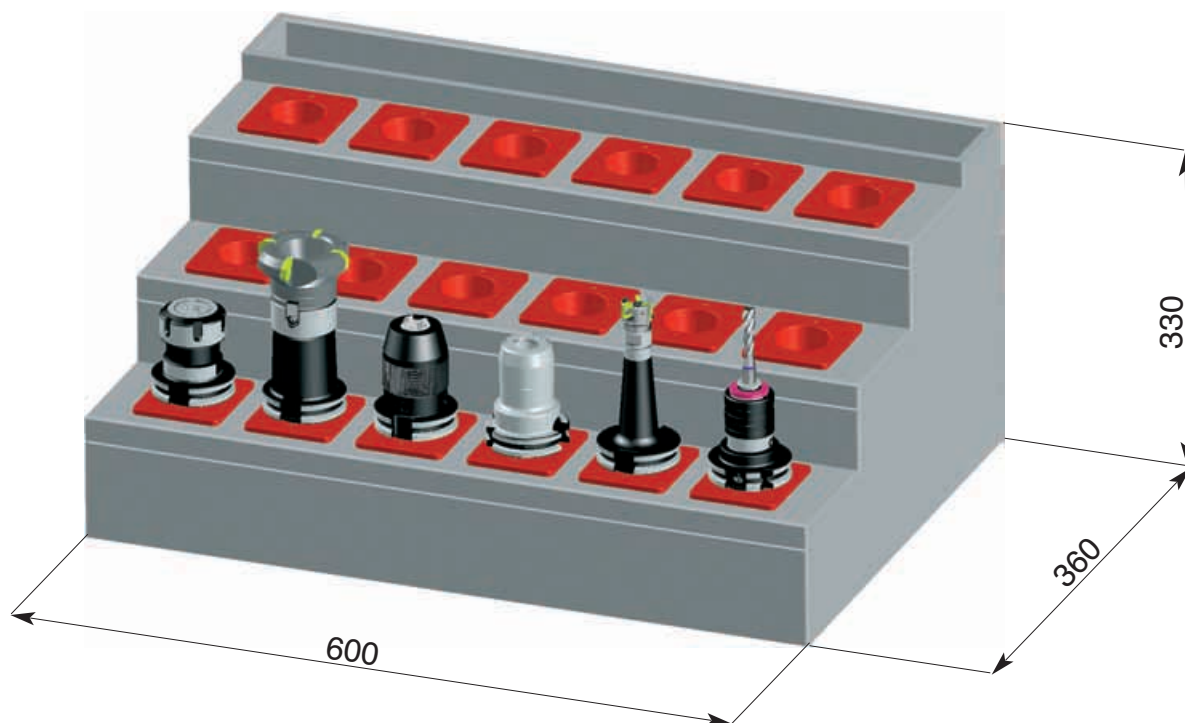


Codice di ord. Code	Tipo Type	N° sedi	boccola art:
UB.ISO.0300	ISO - 30	6	BPISO.0300
UB.ISO.0400	ISO - 40	6	BPISO.0400
UB.ISO.0500	ISO - 50	5	BPISO.0500
UB.HSK.0500	HSK - 50	6	BPHSK.0500
UB.HSK.0630	HSK - 63	6	BPHSK.0630
UB.CL.0320	Ø 32	6	BPCL.0320
UB.CL.0400	Ø 40	6	BPCL.0400
UB.CL.0500	Ø 50	5	BPCL.0500



ART: Magazzino portaconi

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5



Codice di ord. Code	Tipo Type	N° sedi	boccola art:
MP.ISO.0300	ISO - 30	15	BP.ISO.0300
MP.ISO.0400	ISO - 40	15	BP.ISO.0400
MP.ISO.0450	ISO - 45	15	BP.ISO.0450
MP.ISO.0500	ISO - 50	12	BP.ISO.0500
MP.HSK.0500	HSK - 50	15	BPHSK.0500
MP.HSK.0630	HSK - 63	15	BPHSK.0630
MP.CL.0320	32	15	BP.CL.0320
MP.CL.0400	Ø 40	15	BP.CL.0400
MP.CL.0500	Ø 50	12	BP.CL.0500

