

TECNOLOGIA DI ALESATURA AD ALTE PRESTAZIONI

TECHNOLOGY OF REAMING HIGH PERFORMANCE
TECNOLOGIE ALÉSAGE DE HAUTE PERFORMANCE
TECNOLOGÍA ESCARIADOR DE ALTO RENDIMIENTO



REA

CATALOGO - LISTINO

CATALOGUE- PRICE LIST

2016



IGUTENSILI
COSTRUZIONE E AFFILATURA



L'adduzione interna di refrigerante e la spaziatura fortemente disuguale dei taglienti sono caratteristiche che garantiscono tolleranze di foro molto strette e finiture superficiali di alta qualità.

Vantaggi

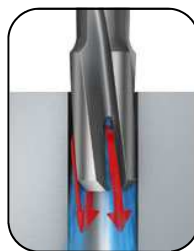
- Alta produttività grazie ad elevati parametri di taglio
- Costanza e produttività che consentono di ridurre tempi e costi
- Eccellente finitura superficiale del componente
- Concentricità uniforme, per la precisione dimensionale ed una lunga durata del tagliente
- Elevata stabilità grazie al corpo in metallo duro
- Adduzione interna di refrigerante, per ottimizzare l'evacuazione del truciolo e ridurre l'usura

Caratteristiche

- Carburo a micrograna di durezza e tenacità elevate
- L'adduzione interna di refrigerante (assiale per la scanalatura dritta e laterale per quella elicoidale) consente di applicare il refrigerante direttamente sulla zona di taglio, favorendo una superiore durata del tagliente ed una buona evacuazione del truciolo
- Stelo DIN 65535 HA con tolleranza H6 e per bloccaggio diretto in mandrini idraulici, a calettamento termico e ad alta precisione
- Geometria delle scanalature con spaziatura fortemente disuguale

Applicazione

- Per tutti i segmenti industriali (lavorazione generale, stampi e matrici, industria automobilistica, generazione di energia ed elettricità, ecc.)
- Disponibile con scanalatura elicoidale per fori passanti e con scanalatura dritta per fori ciechi



Scanalatura elicoidale

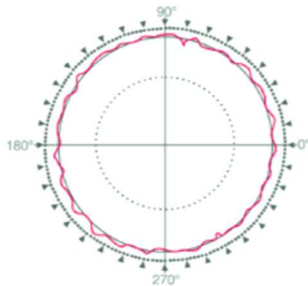
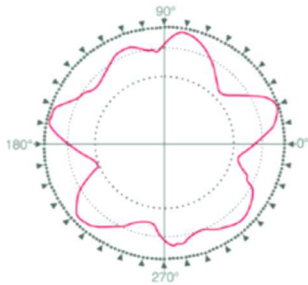
- Per fori passanti
- Deflusso dei trucioli sicuro
- Angolo di scorrimento dei trucioli ridotto
- Adatta per tagli interrotti

SERIE 30



Comparazione tra alesatori a passo differenziato e alesatori REA.

Le gole degli alesatori REA ogni tagliente non ha la stessa divisione.



Vantaggi per il l'utente

- ◆ Per elevate prestazioni nell'alesatura di precisione su centri di lavoro
- ◆ Elevati parametri di taglio significano elevata produttività e riduzione dei tempi e costi di produzione.
- ◆ Eccellente finitura superficiale dei componenti realizzati.
- ◆ Uniforme concentricità degli alesatori REA, lunga vita dello stesso dimensioni precise.
- ◆ Per alesatura su una vasta gamma di materiali, anche con durezza sino a 63HRC. Gli alesatori REA sono specificatamente studiati per lavorazioni su Acciaio Inox.
- ◆ Nel caso gli alesatori siano dotati di gole elicoidali sinistre e passaggio refrigerante interno per alesatura di fori passanti, i trucioli vengono spinti in avanti, prevenendo il loro effetto negativo per quanto concerne la qualità della superficie foro.
- ◆ Gli alesatori con gole diritte e passaggio refrigerante interno, per l'esecuzione di fori ciechi, assicurano che i trucioli si rompano in piccoli frammenti, facili da evaquare per una lavorazione senza problemi.



The internal coolant supply and the largely unequal spacing of the cutting edges are features that ensure very narrow hole tolerances and highest quality surface finishes.

Features

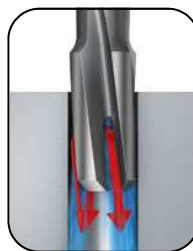
- High productivity thanks to high cutting parameters
- Consistency and productivity that allow reducing times and costs
- Excellent surface finish of the component
- Uniform concentricity for dimensional accuracy and cutting edge long life
- High stability thanks to the hard metal body
- Internal coolant supply for optimising the evacuation of shavings and reduce wear

Advantages

- High hardness and toughness micro-grain carbide
- The internal coolant supply (axial for straight grooving and side for helical) allows to apply the coolant directly onto the cutting area, favouring a higher cutting edge life and a good evacuation of the shavings.
- DIN 65535 HA stem with H6 tolerance and for direct clamping in hydraulic chucks, thermal joining and high precision
- Geometry of the grooves with highly unequal spacing

Application

- Suitable for all industrial segments (general machining, moulds and dies, automotive, power generation and electricity, etc.)
- Available with helical groove for through holes and with straight groove for blind holes



- Helical groove
- For through holes
- Safe shavings outflow
- Shavings reduced angle sliding
- Suitable for interrupted cuts

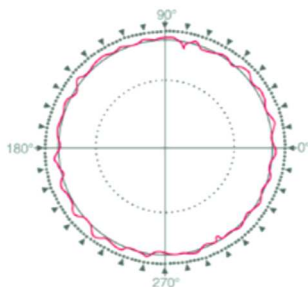
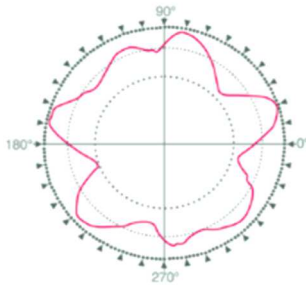
SERIES 30



Advantages for the user

Comparison between differentiated pitch reamers and the REA reamers.

The REA reamer grooves of each cutting edge do not have the same division.



- ◆ For high performance in machining centres precision boring
- ◆ High cutting parameters mean high productivity and reduction of production time and costs.
- ◆ Excellent surface finish of the produced components
- ◆ Uniform concentricity of REA reamers, long life to the latter with exact dimensions
- ◆ For boring on a wide range of materials, even with hardness up to 63HRC. The REA reamers are specifically designed for machining on stainless steel.
- ◆ In the event that reamers are equipped with left helical grooves and internal coolant passage for reaming of through holes, the shavings are pushed forward, preventing their negative effect with regard to the quality of the hole surface.
- ◆ Reamers with straight grooves and internal coolant passage for the execution of blind holes ensure that the shavings break into small fragments, easy to evacuate for trouble-free machining.



L'adduction interne de réfrigérant et l'espacement fortement inégal des tranchants sont des caractéristiques qui garantissent des tolérances de trou très étroites et des finitions superficielles de haute qualité

Avantages

Haute productivité grâce à des paramètres de coupe élevés
 Constance et productivité permettant de réduire les délais et les coûts
 Excellente finition superficielle du composant
 Concentricité uniforme, pour la précision de dimensions et une longue durée du tranchant
 Haute stabilité grâce au corps en métal dur
 Adduction interne de réfrigérant, pour optimiser l'évacuation du copeau et réduire l'usure

Caractéristiques

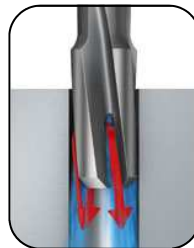
Carbure à micro-grain de dureté et de ténacité élevées
 L'adduction interne de réfrigérant (axial pour la rainure droite et latéral pour la rainure hélicoïdale) permet d'appliquer le réfrigérant directement sur la zone de coupe, en favorisant une durée supérieure du tranchant et une bonne évacuation du copeau

Tige DIN 65535 HA avec tolérance H6 pour blocage direct en mandrins hydrauliques, à clavetage thermique et à haute précision

Géométrie des rainures avec espacement fortement inégal

Application

Pour tous les segments industriels (usinage général, moules et matrices, industrie automobile, génération d'énergie et d'électricité, etc.) Disponible avec rainure hélicoïdale pour trous passant et avec rainure droite pour les trous borgnes



Rainure hélicoïdale
 Pour trous passant
 Évacuation des copeaux sûre
 Angle de fluage des copeaux réduit
 Parfait pour coupes interrompues

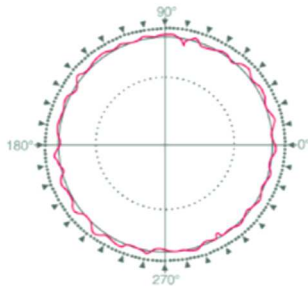
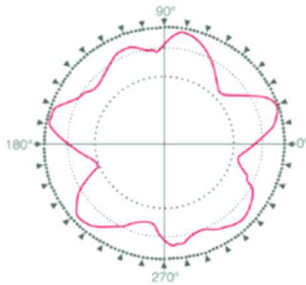
Série 30



Avantages pour l'utilisateur

Comparaison entre alésoirs à pas différencié et alésoirs REA.

Chaque tranchant n'a pas la même division dans les gorges des alésoirs REA.



- ◆ Pour de hautes prestations dans l'alésage de précision sur les centres de travail
- ◆ Des paramètres de coupe élevés signifient une haute productivité et une réduction des délais et des coûts de production.
- ◆ Excellente finition superficielle des composants réalisés.
- ◆ Concentricité uniforme des alésoirs REA, longue vie de ces derniers et dimensions précises.
- ◆ Pour alésage sur une vaste gamme de matériaux, mêmes avec une dureté de 63HRC Les alésoirs REA sont spécialement étudiés pour usinages sur Acier Inox.
- ◆ Si les alésoirs sont équipés de gorges hélicoïdales gauches et passage réfrigérant interne pour alésage de trous passant, les copeaux sont poussés en avant afin de contrer tout effet négatif en termes de qualité de la surface du trou.
- ◆ En ce qui concerne l'exécution de trous borgnes, les alésoirs avec gorges droites et passage réfrigérant interne permettent que les copeaux se fragmentent en petits morceaux, faciles à évacuer pour travailler, sans aucun problème.



La aducción interna de refrigerante y el espaciado fuertemente desigual de los filos son características que garantizan tolerancias de agujero muy estrechas y acabados superficiales de alta calidad

Ventajas

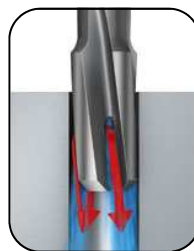
- Alta productividad gracias a elevados parámetros de corte
- Constancia y productividad que permiten reducir tiempos y costes
- Excelente acabado superficial del componente
- Concentricidad uniforme para la precisión dimensional y una larga duración del corte
- Elevada estabilidad gracias al cuerpo de metal duro
- Aducción interna de refrigerante para optimizar la evacuación de la viruta y reducir el desgaste

Características

- Carburo de micrograno de elevadas dureza y tenacidad
- La aducción interna de refrigerante (axial para el acanalado derecho y lateral para el helicoidal) permite aplicar el refrigerante directamente en la zona de corte, favoreciendo la duración superior del filo y la buena evacuación de la viruta
- Vástago DIN 65535 HA con tolerancia H6 y para el bloqueo directo en portaherramientas hidráulicos, de ensambladura térmica y de alta precisión
- Geometría de los acanalados con espaciado fuertemente desigual

Aplicaciones

Para todos los segmentos industriales (trabajo general, moldes y matrices, industria del automóvil, generación de energía y electricidad, etc.) Disponible con acanalado helicoidal para agujeros pasantes y con acanalado derecho para agujeros ciegos



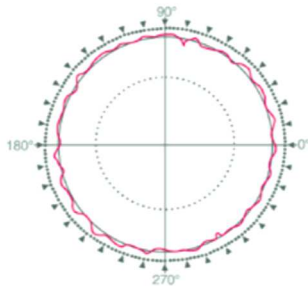
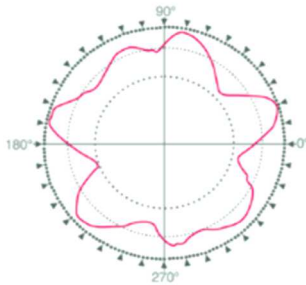
Acanalado helicoidal
Para agujeros pasantes
Flujo seguro de las virutas
Reducido ángulo de deslizamiento de las viruta
Adecuada para cortes interrumpidos

Serie 30



Comparación entre escariadores de paso diferenciado y alisadores REA.

Las gargantas de los alisadores REA cada corte no tiene la misma división.



Ventajas para el utilizador

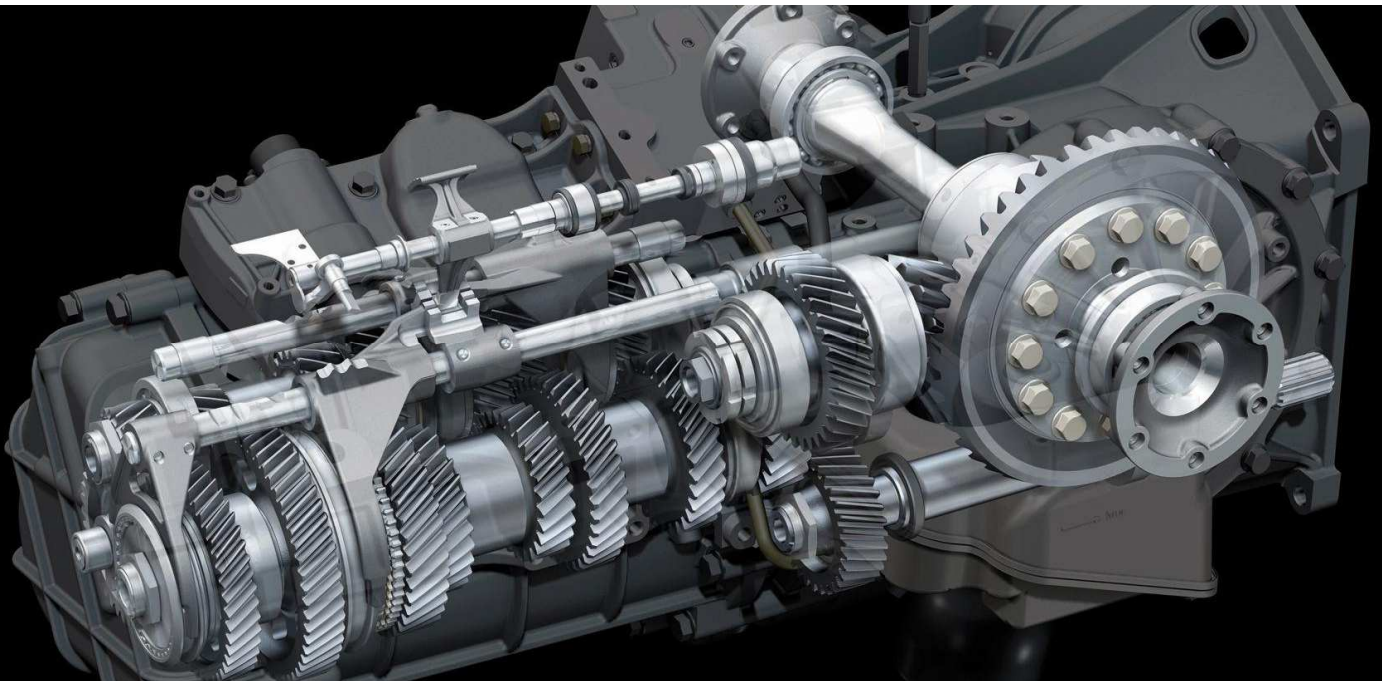
- ◆ Para elevadas prestaciones en escariado de precisión en centro de mecanizado
- ◆ Elevados parámetros de corte significan elevada productividad y reducción de los tiempos y costes de producción.
- ◆ Excelente acabado superficial de los componentes realizados.
- ◆ Uniforme concentricidad de los escariadores REA, larga vida del mismo y dimensiones precisas.
- ◆ Para escariado en una vasta gama de materiales, incluso con durezas de hasta 63HRC. Los alisadores REA han sido específicamente estudiados para trabajos en Acero Inox.
- ◆ En el caso en que los escariadores dispongan de gargantas helicoidales izquierdas y paso del refrigerante interno para escariado de agujeros pasantes, las virutas son empujadas hacia adelante previendo su efecto negativo en lo que se refiere a la calidad de la superficie del agujero.
- ◆ Los escariadores con gargantas derechas y paso del refrigerante interno, para la ejecución de agujeros ciegos, aseguran que virutas se rompan en pequeños fragmentos fáciles de evacuar para un trabajo sin problemas.

01

REA 30 TG

Alesatore RIVESTITO fori nella gola

Reamer COATED with holes in the groove
Alésoir REVÊTU trous dans la gorge
Alisador REVESTIDO agujeros en la garganta



🇮🇹 Alesatore centesimale gola elicoidale sinistra

Per fori passanti

Deflusso dei trucioli sicuro

Angolo di scorrimento dei trucioli ridotto

Adatto per tagli interrotti

Left helical groove centesimal reamer 🇬🇧

For through holes

Safe shavings outflow

Shavings reduced angle sliding

Suitable for interrupted cuts

🇫🇷 Alésoir centésimal gorge hélicoïdale gauche

Pour trous passant

Évacuation des copeaux sûre

Angle de fluage des copeaux réduit

Parfait pour coupes interrompues

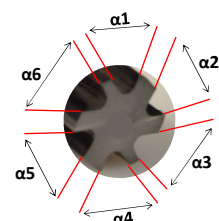
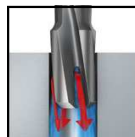
🇪🇸 Escariado centesimal der garganta helicoidal izquierda

Para agujeros pasantes

Flujo de las cepilladuras seguro

Ángulo de deslizamiento de las cepilladuras reducido

Apto para cortes interrumpidos

TG
**SERIE
30**
 $\varnothing d1$
 $+0,004$
 $-0,000$


DIVISIONE IRREGOLARE

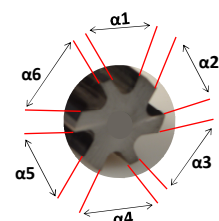
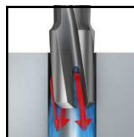


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B2.1/B2.2/B2.3/B2.4

C2.1/C2.2/C2.3/C2.4

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REA.30.TG.0398	3,98	6,0	75,0	12,0	39,0	4	
REA.30.TG.0399	3,99	6,0	75,0	12,0	39,0	4	
REA.30.TG.0400	4,00	6,0	75,0	12,0	39,0	4	
REA.30.TG.0401	4,01	6,0	75,0	12,0	39,0	4	
REA.30.TG.0402	4,02	6,0	75,0	12,0	39,0	4	
REA.30.TG.0403	4,03	6,0	75,0	12,0	39,0	4	
REA.30.TG.0404 - 0449	4,04 - 4,49	6,0	75,0	12,0	39,0	4	
REA.30.TG.0450	4,50	6,0	75,0	12,0	39,0	4	
REA.30.TG.0451 - 0496	4,51 - 4,96	6,0	75,0	12,0	39,0	4	
REA.30.TG.0497	4,97	6,0	75,0	12,0	39,0	4	
REA.30.TG.0498	4,98	6,0	75,0	12,0	39,0	4	
REA.30.TG.0499	4,99	6,0	75,0	12,0	39,0	4	
REA.30.TG.0500	5,00	6,0	75,0	12,0	39,0	4	
REA.30.TG.0501	5,01	6,0	75,0	12,0	39,0	4	
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REA.30.TG.0503	5,03	6,0	75,0	12,0	39,0	4	
REA.30.TG.0504 - 0549	5,04 - 5,49	6,0	75,0	12,0	39,0	4	
REA.30.TG.0550	5,50	6,0	75,0	12,0	39,0	4	
REA.30.TG.0551 - 0596	5,51 - 5,96	6,0	75,0	12,0	39,0	4	
REA.30.TG.0597	5,97	6,0	75,0	12,0	39,0	4	
REA.30.TG.0598	5,98	6,0	75,0	12,0	39,0	4	
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REA.30.TG.0603	6,03	6,0	75,0	12,0	39,0	4	
REA.30.TG.0604 - 0620	6,04 - 6,20	6,0	75,0	12,0	39,0	4	
REA.30.TG.0621 - 0649	6,21 - 6,49	8,0	100,0	16,0	64,0	4	
REA.30.TG.0650	6,50	8,0	100,0	16,0	64,0	6	
REA.30.TG.0651 - 0699	6,51 - 6,99	8,0	100,0	16,0	64,0	6	

TG
**SERIE
30**
 $\varnothing d1$
 $+0,004$
 $-0,000$


DIVISIONE IRREGOLARE



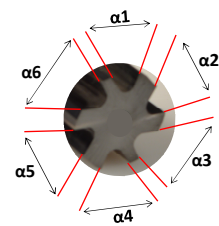
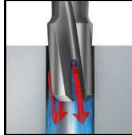
A1.1/A1.2/A1.3/A1.4/A1.5/A1.6

B2.1/B2.2/B2.3/B2.4

C2.1/C2.2/C2.3/C2.4

Codice - Code - Código	d1 +0.004	d2 h6	L1 mm	L2 mm	L3 mm	Z	€
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REA.30.TG.0750	7,50	8,0	100,0	16,0	64,0	6	
REA.30.TG.0751 - 0796 *	7,51 - 7,96	8,0	100,0	16,0	64,0	6	
REA.30.TG.0797	7,97	8,0	100,0	16,0	64,0	6	
REA.30.TG.0798	7,98	8,0	100,0	16,0	64,0	6	
REA.30.TG.0799	7,99	8,0	100,0	16,0	64,0	6	
REA.30.TG.0800	8,00	8,0	100,0	16,0	64,0	6	
REA.30.TG.0801	8,01	8,0	100,0	16,0	64,0	6	
REA.30.TG.0802	8,02	8,0	100,0	16,0	64,0	6	
REA.30.TG.0803	8,03	8,0	100,0	16,0	64,0	6	
REA.30.TG.0804 - 0820 *	8,04 - 8,20	8,0	100,0	16,0	64,0	6	
REA.30.TG.0821 - 0849 *	8,21 - 8,49	10,00	100,0	20,0	60,0	6	
REA.30.TG.0850	8,50	10,00	100,0	20,0	60,0	6	
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REA.30.TG.0900	9,00	10,00	100,0	20,0	60,0	6	
REA.30.TG.0901 - 0920 *	9,01 - 9,20	10,00	100,0	20,0	60,0	6	
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REA.30.TG.0950	9,50	10,00	120,0	20,0	80,0	6	
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REA.30.TG.0997	9,97	10,00	120,0	20,0	80,0	6	
REA.30.TG.0998	9,98	10,00	120,0	20,0	80,0	6	
REA.30.TG.0999	9,99	10,00	120,0	20,0	80,0	6	
REA.30.TG.1000	10,00	10,00	120,0	20,0	80,0	6	
REA.30.TG.1001	10,01	10,00	120,0	20,0	80,0	6	
REA.30.TG.1002	10,02	10,00	120,0	20,0	80,0	6	
REA.30.TG.1003	10,03	10,00	120,0	20,0	80,0	6	
REA.40.TG.1004 - 1020 *	10,04 - 10,20	10,00	120,0	20,0	80,0	6	
REA.40.TG.1021 - 1049 *	10,21 - 10,49	12,00	120,0	20,0	75,0	6	
REA.40.TG.1050	10,50	12,00	120,0	20,0	75,0	6	
REA.40.TG.1051 - 1099 *	10,51 - 10,99	12,00	120,0	20,0	75,0	6	
REA.40.TG.1100	11,00	12,00	120,0	20,0	75,0	6	

* ON DEMAND

TG
**SERIE
30**
 $\varnothing d1$
 $+0,004$
 $-0,000$


DIVISIONE IRREGOLARE



A1.1/A1.2/A1.3/A1.4/A1.5/A1.6

B2.1/B2.2/B2.3/B2.4

C2.1/C2.2/C2.3/C2.4

Codice - Code - Código	d1 +0.004	d2 h6	L1 mm	L2 mm	L3 mm	Z	€
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REA.30.TG.1151 - 1196 *	11,51 - 11,96	12,0	120,0	20,0	75,0	6	
REA.30.TG.1197	11,97	12,0	120,0	20,0	75,0	6	
REA.30.TG.1198	11,98	12,0	120,0	20,0	75,0	6	
REA.30.TG.1199	11,99	12,0	120,0	20,0	75,0	6	
REA.30.TG.1200	12,00	12,0	120,0	20,0	75,0	6	
REA.30.TG.1201	12,01	12,0	120,0	20,0	75,0	6	
REA.30.TG.1202	12,02	12,0	120,0	20,0	75,0	6	
REA.30.TG.1203	12,03	12,0	120,0	20,0	75,0	6	
REA.30.TG.1204 - 1220 *	12,04 - 12,20	12,0	120,0	20,0	75,0	6	
REA.30.TG.1221 - 1299 *	12,21 - 12,99	14,0	130,0	22,0	85,0	6	
REA.30.TG.1300	13,00	14,0	130,0	22,0	85,0	6	
REA.30.TG.1301 - 1399 *	13,01 - 13,99	14,0	130,0	22,0	85,0	6	
REA.30.TG.1400	14,00	14,0	130,0	22,0	85,0	6	
REA.30.TG.1401 - 1420 *	14,01 - 14,20	14,0	130,0	22,0	85,0	6	
REA.30.TG.1421 - 1499	14,21 - 14,99	16,0	150,0	22,0	82,0	6	
REA.30.TG.1500	15,00	16,0	150,0	22,0	82,0	6	
REA.30.TG.1501 - 1520 *	15,01 - 15,20	16,0	150,0	22,0	82,0	6	
REA.30.TG.1521 - 1599 *	15,21 - 15,99	16,0	150,0	22,0	102,0	6	
REA.30.TG.1600	16,00	16,0	150,0	22,0	102,0	6	
REA.30.TG.1601 - 1699 *	16,01 - 16,99	16,0	150,0	22,0	102,0	6	
REA.30.TG.1700	17,00	18,0	150,0	25,0	102,0	6	
REA.30.TG.1701 - 1799 *	17,01 - 17,99	18,0	150,0	25,0	102,0	6	
REA.30.TG.1800	18,00	18,0	150,0	25,0	102,0	6	
REA.30.TG.1801 - 1820 *	18,01 - 18,20	18,0	150,0	25,0	102,0	6	
REA.30.TG.1821 - 1899 *	18,21 - 18,99	20,0	150,0	25,0	100,0	6	
REA.30.TG.1900	19,00	20,0	150,0	25,0	100,0	6	
REA.30.TG.1901 - 1999 *	19,01 - 19,99	20,0	150,0	25,0	100,0	6	
REA.30.TG.2000	20,00	20,0	150,0	25,0	100,0	6	
REA.30.TG.2001 - 2020 *	20,01 - 20,20	20,0	150,0	25,0	100,0	6	

* ON DEMAND

02

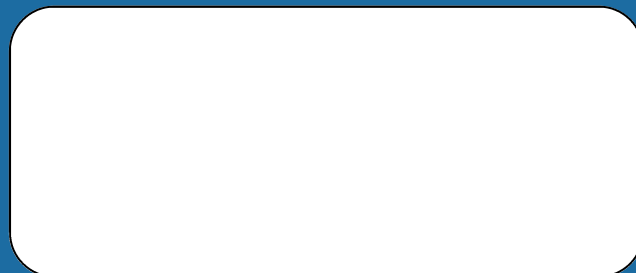
SEZIONE TECNICA

Technical section

Section technique

Sección técnica





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