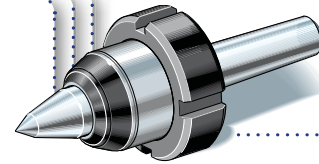




► CSF ◀



Contropunte rotanti

Live centers

Mitlaufende Körnerspitzen

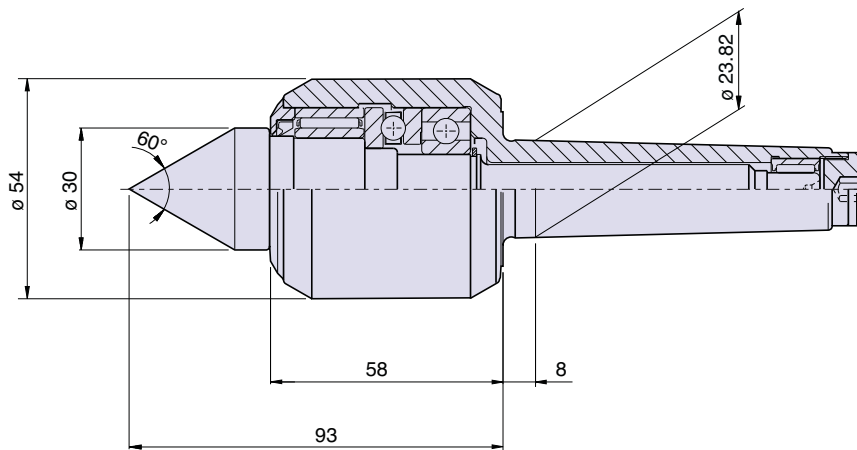


Le contropunte della serie CSF, si differenziano dalle altre sul mercato, per la caratteristica del loro corpo, di ampia sezione, che permette, oltre all'inserimento di cuscinetti di grandi dimensioni, un maggiore avvicinamento del carrello porta utensile al pezzo, con il grande vantaggio di non avere un utensile a sbalzo, guadagnando in rigidità e precisione. Costruite con un albero centrale lungo quanto il corpo, permettono alti carichi di lavoro ed elevate spinte assiali della contropunta, non raggiungibili, con lo stesso cono morse, da qualsiasi altro prodotto.

The CSF series live centers differ from others on the market because of their large square cross-section body. This not only allows large bearings to be used but also permits the tool carriage to move closer to the workpiece; the great advantage is not having an overhang tool, thus increasing rigidity and precision. Made with a central shaft the same length as the body, they allow heavy work loads and high axial thrusts of the livecenter that, with the same taper, are not possible with any other product.

Die CSF Körnerspitzen unterscheiden sich von anderen auf dem Markt durch Ihren großen Grundkörper. Damit können nicht nur große Lager verwendet werden sondern es kann auch der Werkzeughalter näher an das Werkstück bewegt werden. Der große Vorteil ist aber nicht ein Ausladungs-Werkzeug zu haben, sondern eine Steigerung von Steifheit und Genauigkeit. Da der zentraler Schaft genauso lang ist wie der Körper, kann eine hohe Arbeitsbelastungen und ein hoher Axialdruck auf die Körnerspitze ausgewirkt werden. Nicht möglich mit dem selben Morsekegel irgendeines anderen Produktes.

Contropunta tipo CSF3/S (standard) per cono morse 3
 Live center type CSF3/S (standard) for taper 3
 Körnerspitze Typ CSF3/S (Standard) für Morsekegel 3



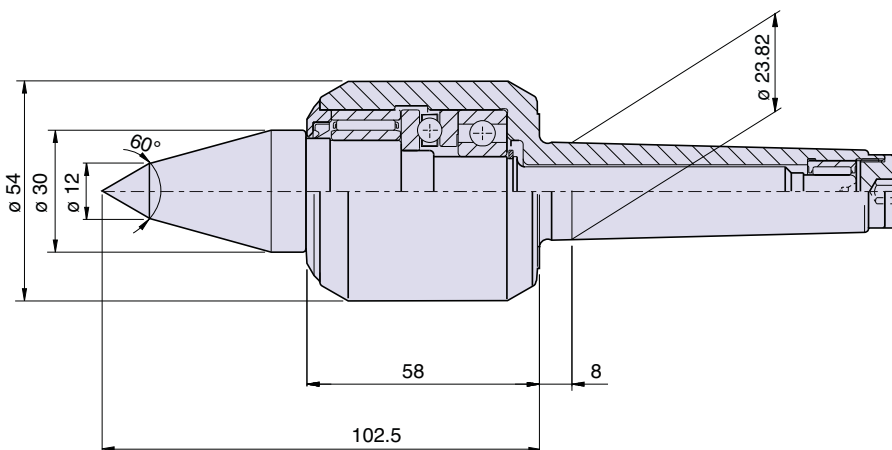
► Code **32013**

Carico max	daN 2000
Max load	
Max Belastung	
Eccentricità max	mm 0,003
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	5000
R.p.m.	
U/min	

► Code **G32013**

Con ghiera
 With ring nut
 Mit Abdrückmutter

Contropunta tipo CSF3/L (punta da copia) per cono morse 3
 Live center type CSF3/L (copying point) for taper 3
 Körnerspitze Typ CSF3/L (verlängerte Laufspitze) für Morsekegel 3



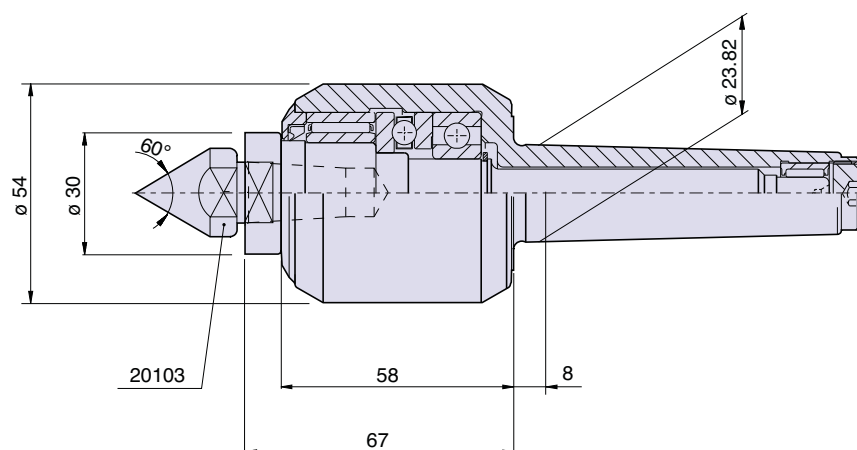
► Code **32033**

Carico max	daN 1600
Max load	
Max Belastung	
Eccentricità max	mm 0,003
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	5000
R.p.m.	
U/min	

► Code **G32033**

Con ghiera
 With ring nut
 Mit Abdrückmutter

Contropunta tipo CSF3/R (con ricambio) per cono morse 3
 Live center type CSF3/R (with spare point) for taper 3
 Körnerspitze Typ CSF3/R (mit auswechselbaren Einsätzen) für Morsekegel 3

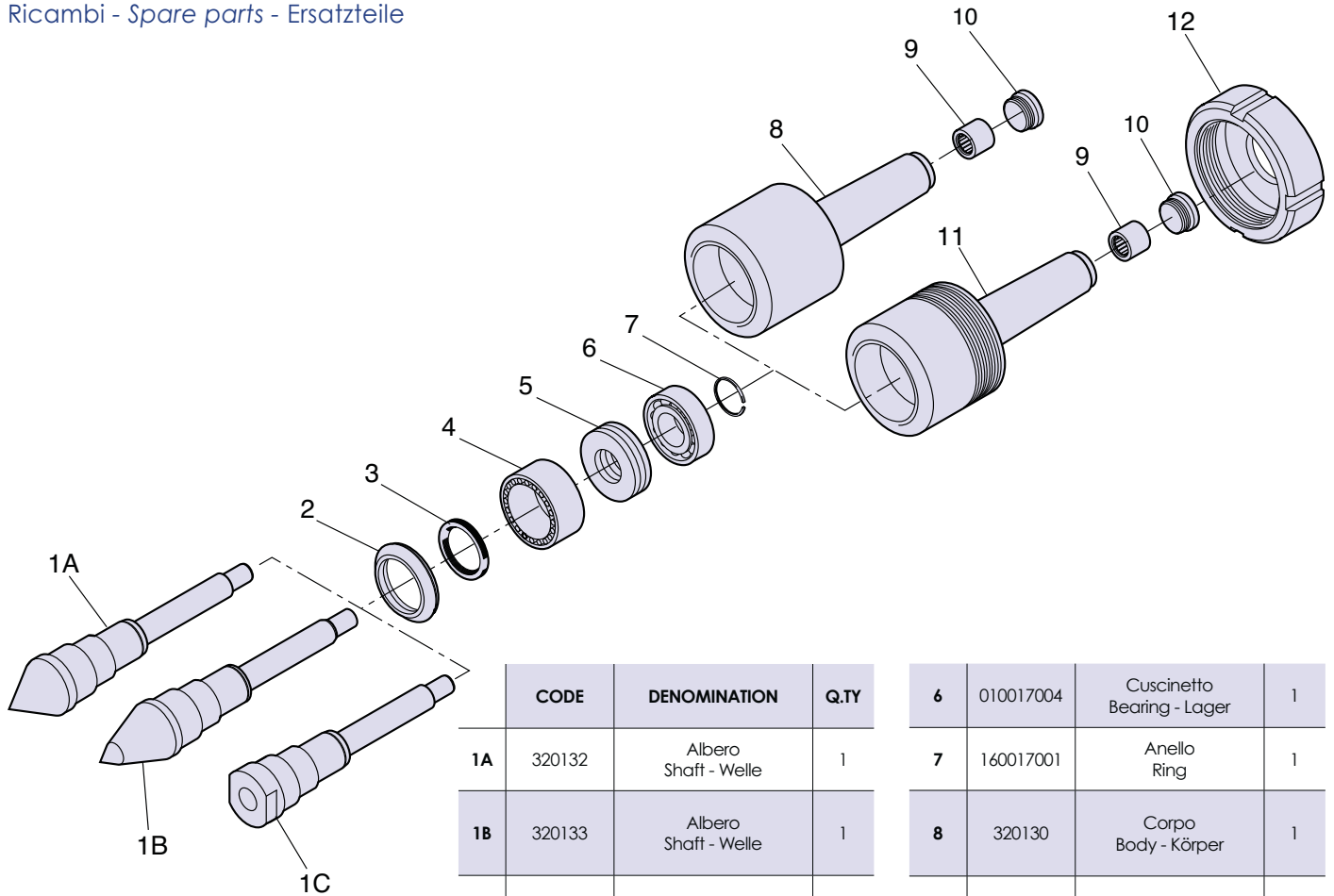


► Code **32023**

Carico max	daN 1400
Max load	
Max Belastung	
Eccentricità max	mm 0,005
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	5000
R.p.m.	
U/min	

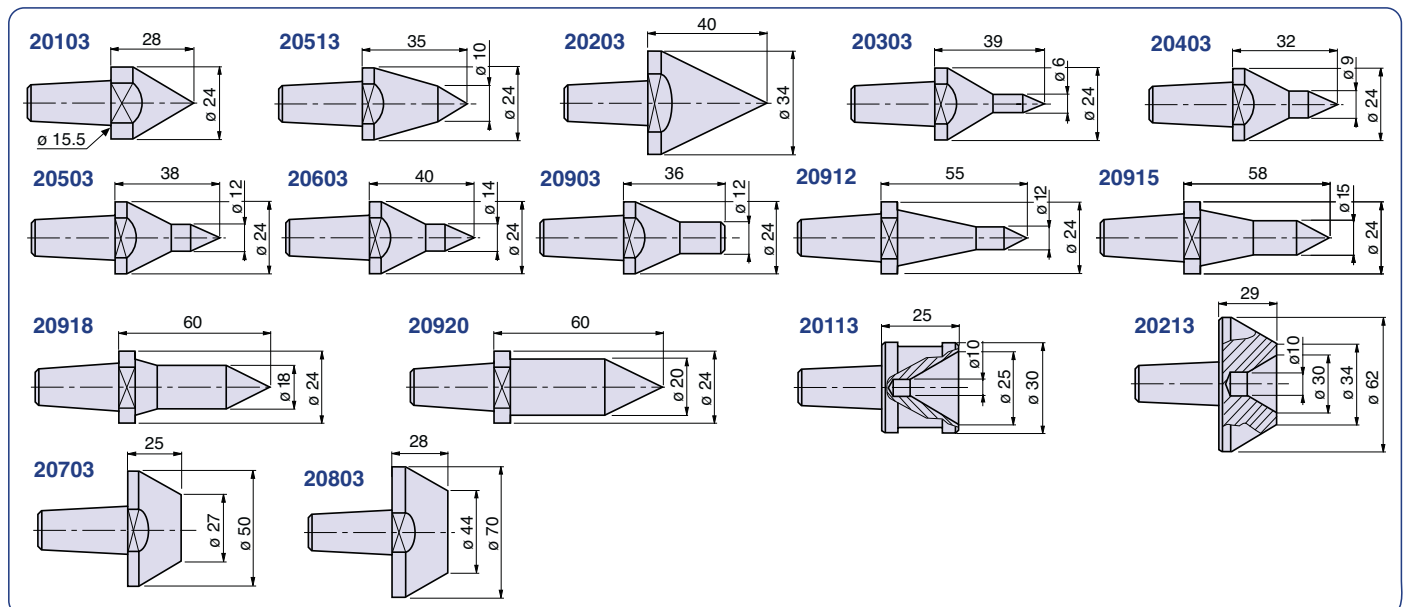
► Code **G32023**

Con ghiera
 With ring nut
 Mit Abdrückmutter

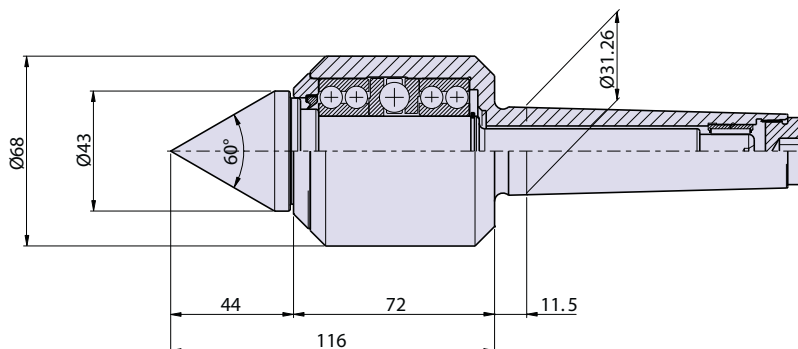


	CODE	DENOMINATION	Q.TY				
	6	010017004	Cuscinetto Bearing - Lager	1			
1A	320132	Albero Shaft - Welle	1	7	160017001	Anello Ring	1
1B	320133	Albero Shaft - Welle	1	8	320130	Corpo Body - Körper	1
1C	320134	Albero Shaft - Welle	1	9	080008001	Cuscinetto Bearing - Lager	1
2	300135	Coperchio Cover - Abdeckung	1	10	320136	Tappo Plug - Stopfen	1
3	150026001	Anello Ring	1	11	G320130	Corpo Body - Körper	1
4	060025001	Cuscinetto Bearing - Lager	1	12	310333	Ghiera Ring-nut Abdrückmutter	1
5	300137	Cuscinetto Bearing - Lager	1				

10 RETTIFICA



Contropunta tipo CSF4/S (standard) per cono morse 4
 Live center type CSF4/S (standard) for taper 4
 Körnerspitze Typ CSF4/S (Standard) für Morsekegel 4



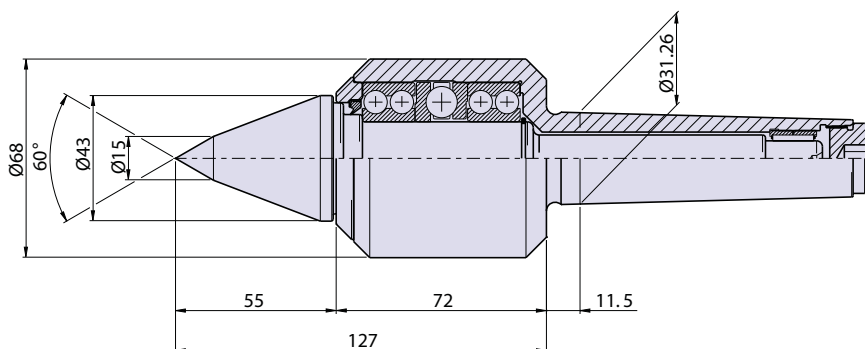
► Code **32014**

Carico max	daN 2300
Max load	
Max Belastung	
Eccentricità max	mm 0,003
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	4000
R.p.m.	
U/min	

► Code **G32014**

Con ghiera
 With ring nut
 Mit Abdrückmutter

Contropunta tipo CSF4/L (punta da copia) per cono morse 4
 Live center type CSF4/L (copying point) for taper 4
 Körnerspitze Typ CSF4/L (verlängerte Laufspitze) für Morsekegel 4



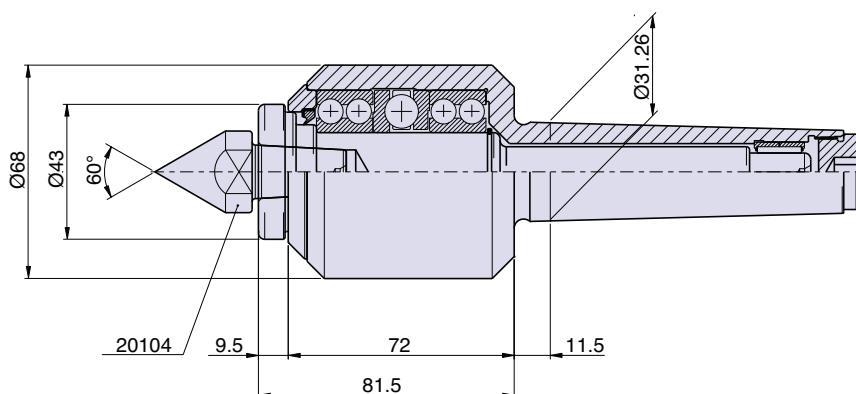
► Code **32034**

Carico max	daN 2000
Max load	
Max Belastung	
Eccentricità max	mm 0,003
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	4000
R.p.m.	
U/min	

► Code **G32034**

Con ghiera
 With ring nut
 Mit Abdrückmutter

Contropunta tipo CSF4/R (con ricambio) per cono morse 4
 Live center type CSF4/R (with spare point) for taper 4
 Körnerspitze Typ CSF4/R (mit auswechselbaren Einsätzen) für Morsekegel 4

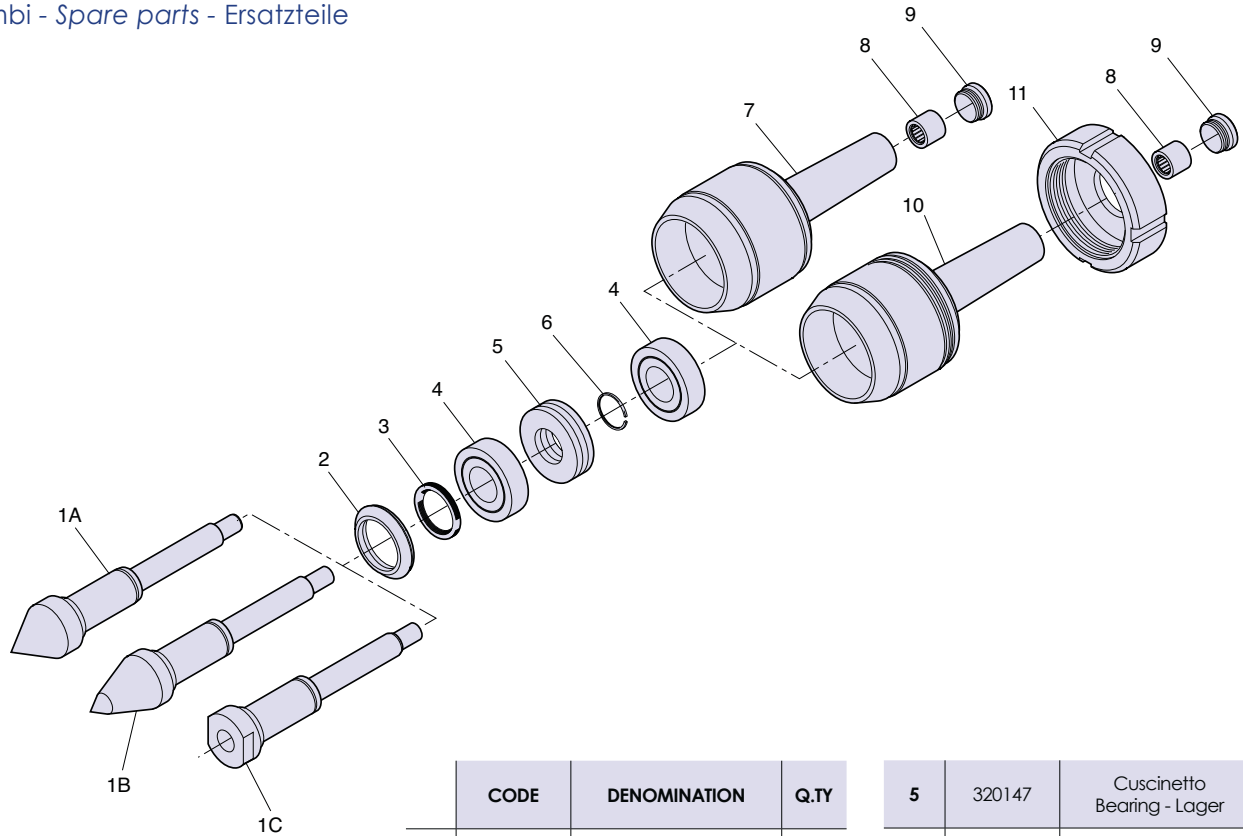


► Code **32024**

Carico max	daN 1700
Max load	
Max Belastung	
Eccentricità max	mm 0,005
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	4000
R.p.m.	
U/min	

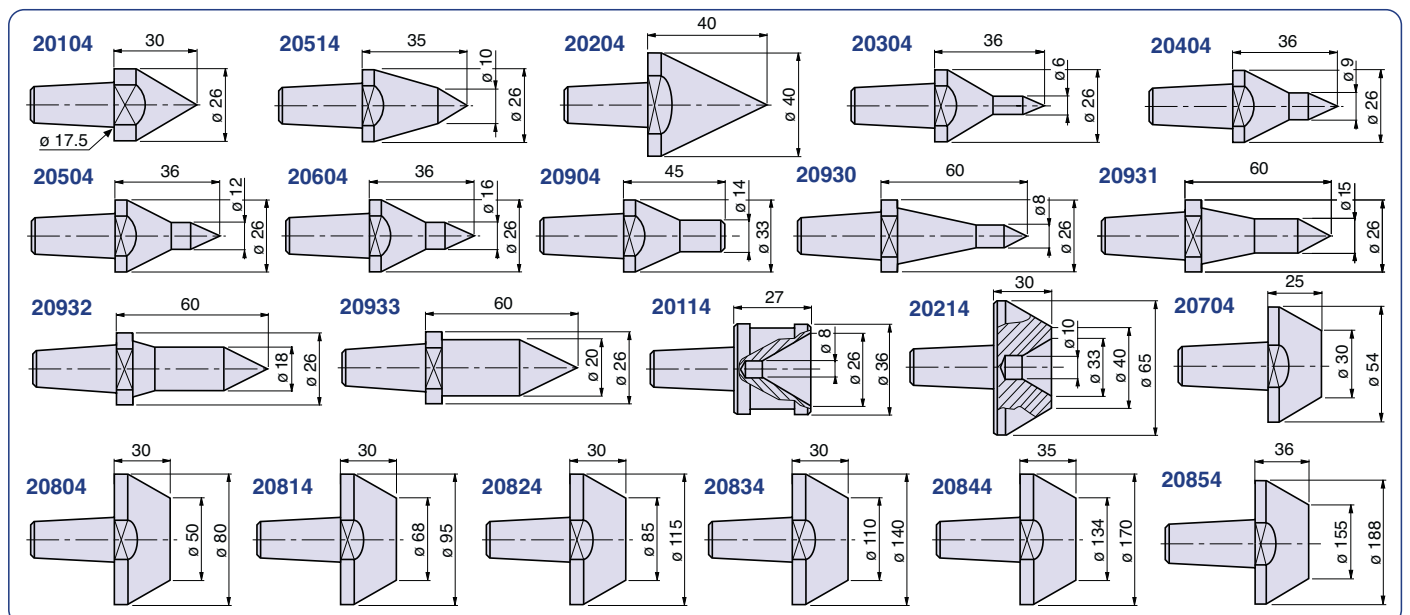
► Code **G32024**

Con ghiera
 With ring nut
 Mit Abdrückmutter

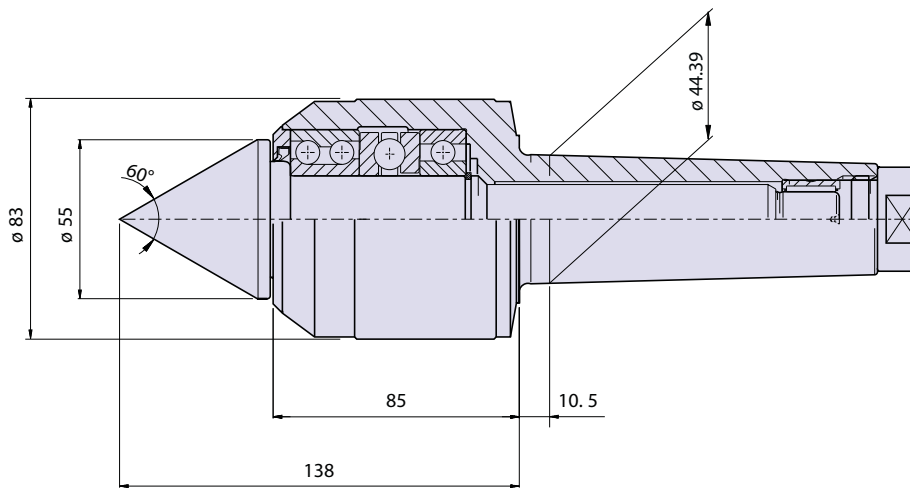


	CODE	DENOMINATION	Q.TY				
				5	320147	Cuscinetto Bearing - Lager	1
1A	320142	Albero Shaft - Welle	1	6	160025002	Anello Ring	1
1B	320143	Albero Shaft - Welle	1	7	320140	Corpo Body - Körper	1
1C	320144	Albero Shaft - Welle	1	8	080012001	Cuscinetto Bearing - Lager	1
2	320145	Coperchio Cover - Abdeckung	1	9	320146	Tappo Plug - Stopfen	1
3	150030002	Anello Ring	1	10	G320140	Corpo Body - Körper	1
4	020025001	Cuscinetto Bearing - Lager	1	11	310433	Ghiera Ring-nut Abdrückmutter	1

10 RETTIFICA



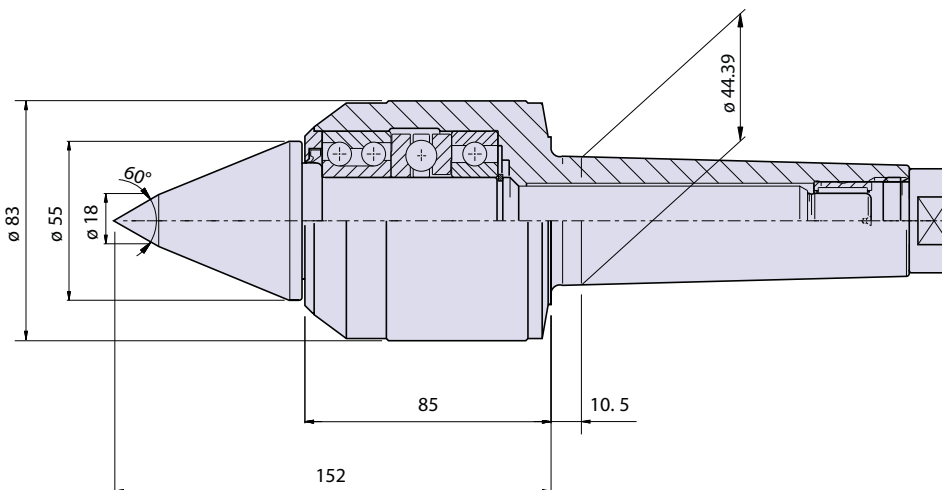
Contropunta tipo CSF5/S (standard) per cono morse 5
 Live center type CSF5/S (standard) for taper 5
 Körnerspitze Typ CSF5/S (Standard) für Morsekegel 5



Code	32015
Carico max	daN
Max load	3700
Max Belastung	
Eccentricità max	mm
Max eccentricity	0,003
Max Rundlaufabweichung	
Giri/1'	
R.p.m.	3000
U/min	

Code	G32015
Con ghiera	
With ring nut	
Mit Abdrückmutter	

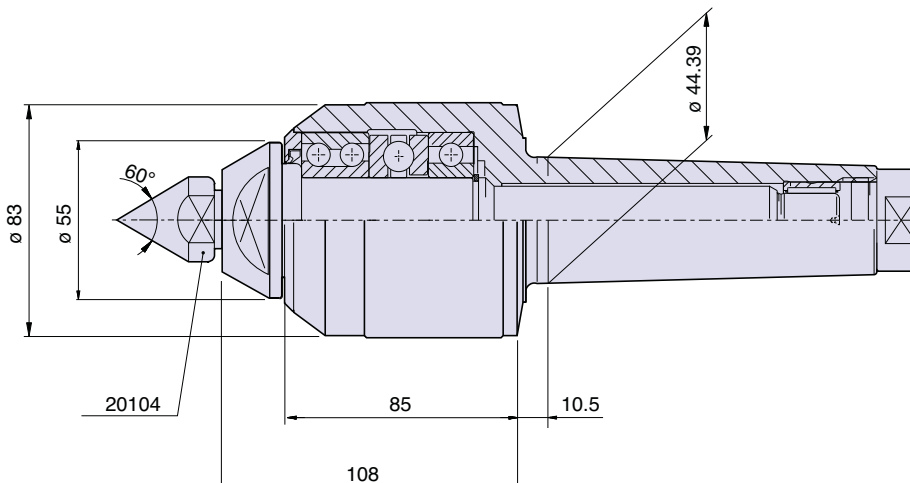
Contropunta tipo CSF5/L (punta da copia) per cono morse 5
 Live center type CSF5/L (copying point) for taper 5
 Körnerspitze Typ CSF5/L (verlängerte Laufspitze) für Morsekegel 5



Code	32035
Carico max	daN
Max load	3200
Max Belastung	
Eccentricità max	mm
Max eccentricity	0,003
Max Rundlaufabweichung	
Giri/1'	
R.p.m.	3000
U/min	

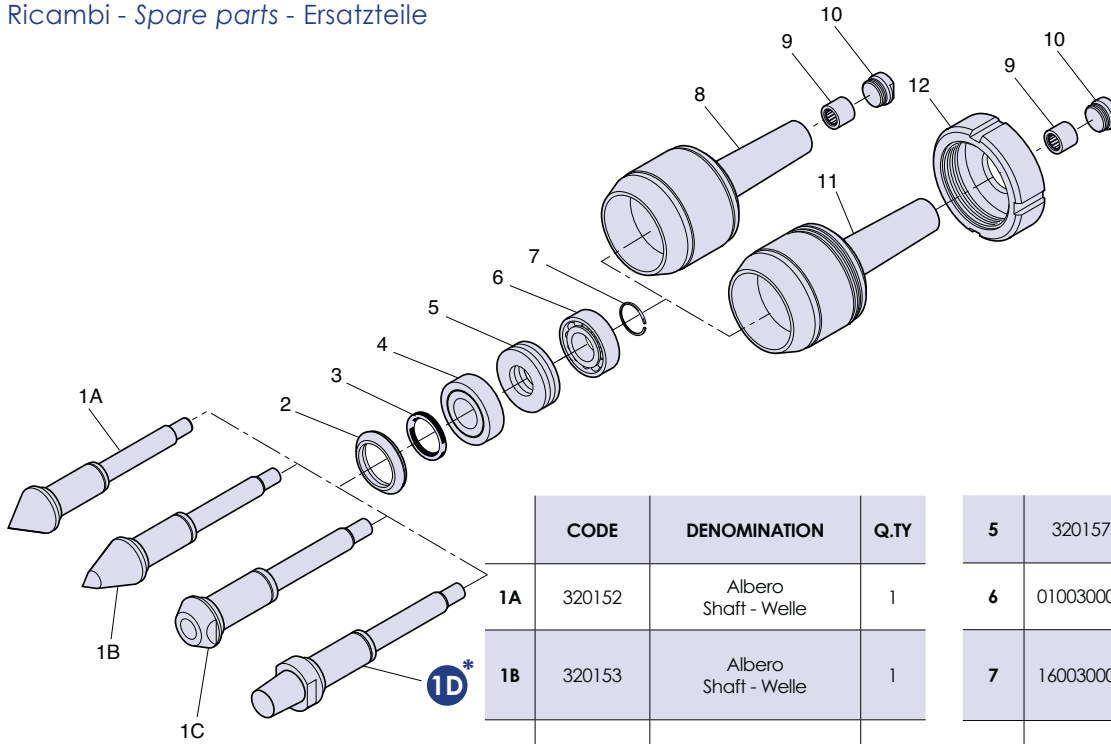
Code	G32035
Con ghiera	
With ring nut	
Mit Abdrückmutter	

Contropunta tipo CSF5/R (con ricambio) per cono morse 5
 Live center type CSF5/R (with spare point) for taper 5
 Körnerspitze Typ CSF5/R (mit auswechselbaren Einsätzen) für Morsekegel 5



Code	32025
Carico max	daN
Max load	2900
Max Belastung	
Eccentricità max	mm
Max eccentricity	0,005
Max Rundlaufabweichung	
Giri/1'	
R.p.m.	3000
U/min	

Code	G32025
Con ghiera	
With ring nut	
Mit Abdrückmutter	



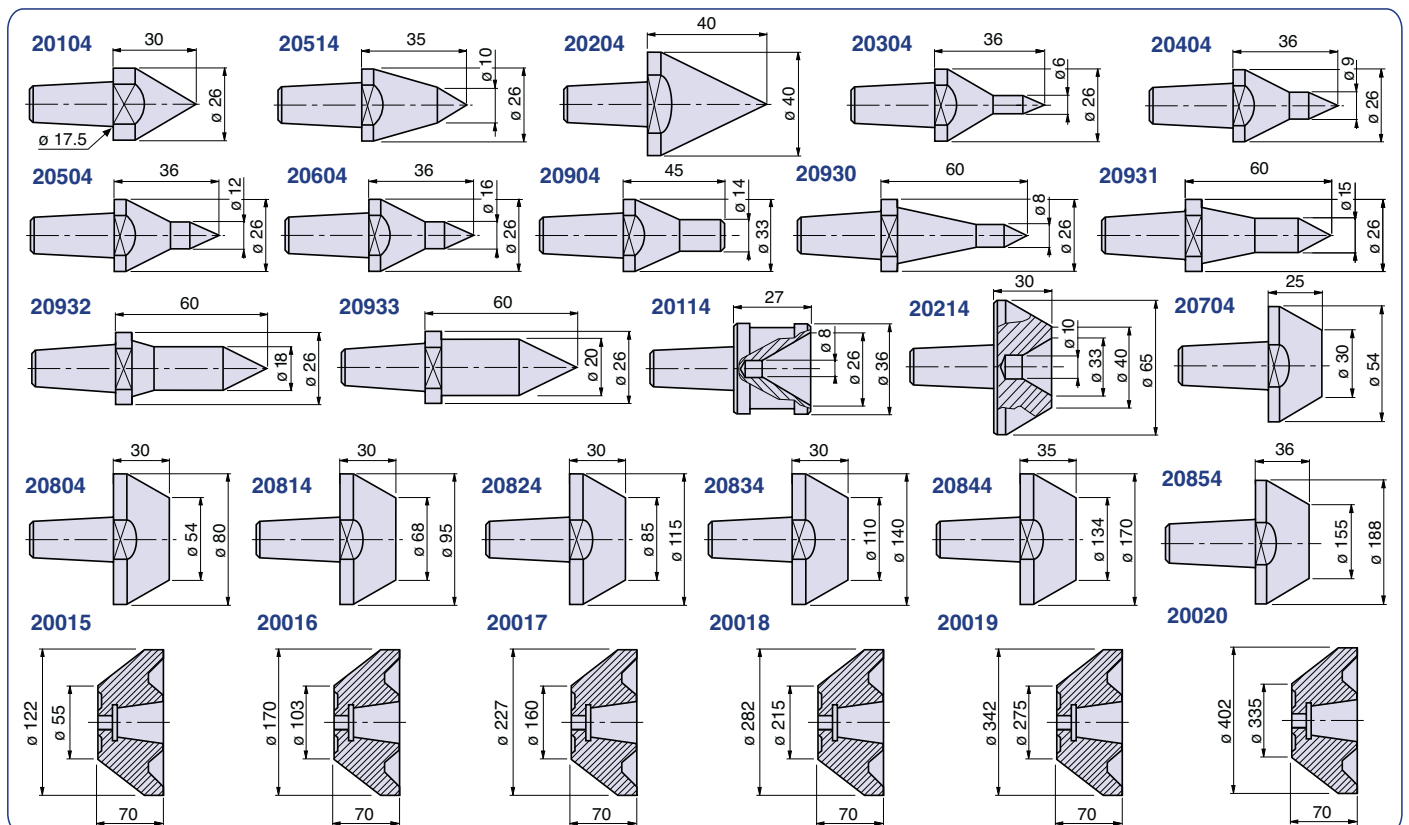
1D* Contropunta con albero 1D
Live center with shaft 1D
Körnerspitze mit Welle 1D

► Code **32005**

► Code **G32005**

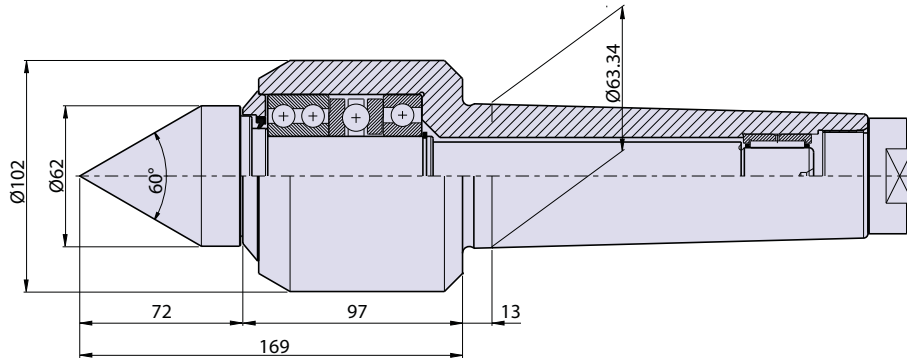
Con ghiera
With ring nut
Mit Abdrückmutter

	CODE	DENOMINATION	Q.TY				
	5	320157	Cuscinetto Bearing - Lager	1			
	6	010030005	Cuscinetto Bearing - Lager	1			
	7	160030001	Anello Ring	1			
	8	320150	Corpo Body - Körper	1			
	9	080019001	Cuscinetto Bearing - Lager	1			
	10	300156	Tappo Plug - Stopfen	1			
	11	G320150	Corpo Body - Körper	1			
	12	310533	Ghiera Ring-nut Abdrückmutter				
1A	320152	Albero Shaft - Welle	1				
1B	320153	Albero Shaft - Welle	1				
1C	320154	Albero Shaft - Welle	1				
1D	320051	Albero Shaft - Welle	1				
2	320155	Coperchio Cover - Abdeckung	1				
3	150040004	Anello Ring	1				
4	040030002	Cuscinetto Bearing - Lager					



10 RETIFICA

Contropunta tipo CSF6/S (standard) per cono morse 6
 Live center type CSF6/S (standard) for taper 6
 Körnerspitze Typ CSF6/S (Standard) für Morsekegel 6



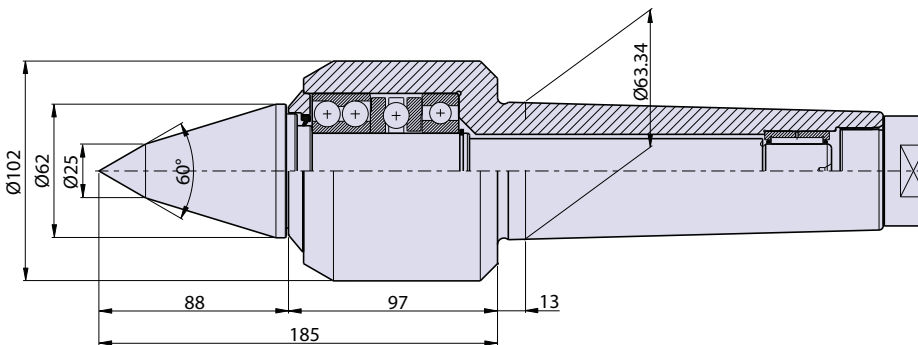
► Code **32016**

Carico max	daN 4900
Max load	
Max Belastung	
Eccentricità max	mm 0,003
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	2200
R.p.m.	
U/min	

► Code **G32016**

Con ghiera
 With ring nut
 Mit Abdrückmutter

Contropunta tipo CSF6/L (punta da copia) per cono morse 6
 Live center type CSF6/L (copying point) for taper 6
 Körnerspitze Typ CSF6/L (verlängerte Laufspitze) für Morsekegel 6



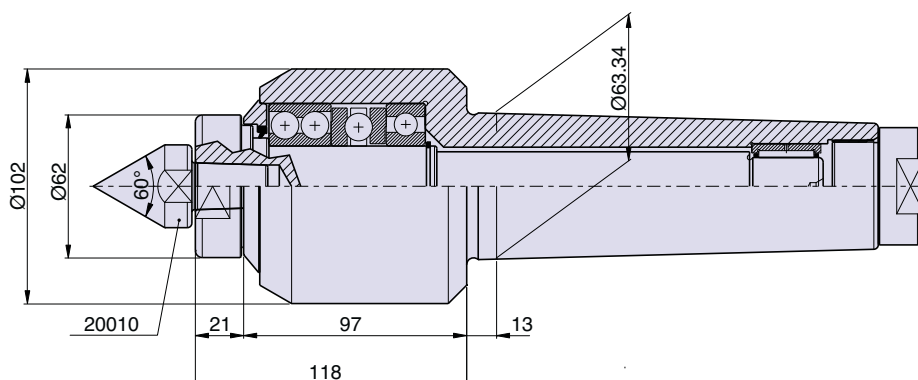
► Code **32036**

Carico max	daN 4400
Max load	
Max Belastung	
Eccentricità max	mm 0,003
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	2200
R.p.m.	
U/min	

► Code **G32036**

Con ghiera
 With ring nut
 Mit Abdrückmutter

Contropunta tipo CSF6/R (con ricambio) per cono morse 6
 Live center type CSF6/R (with spare point) for taper 6
 Körnerspitze Typ CSF6/R (mit auswechselbaren Einsätzen) für Morsekegel 6

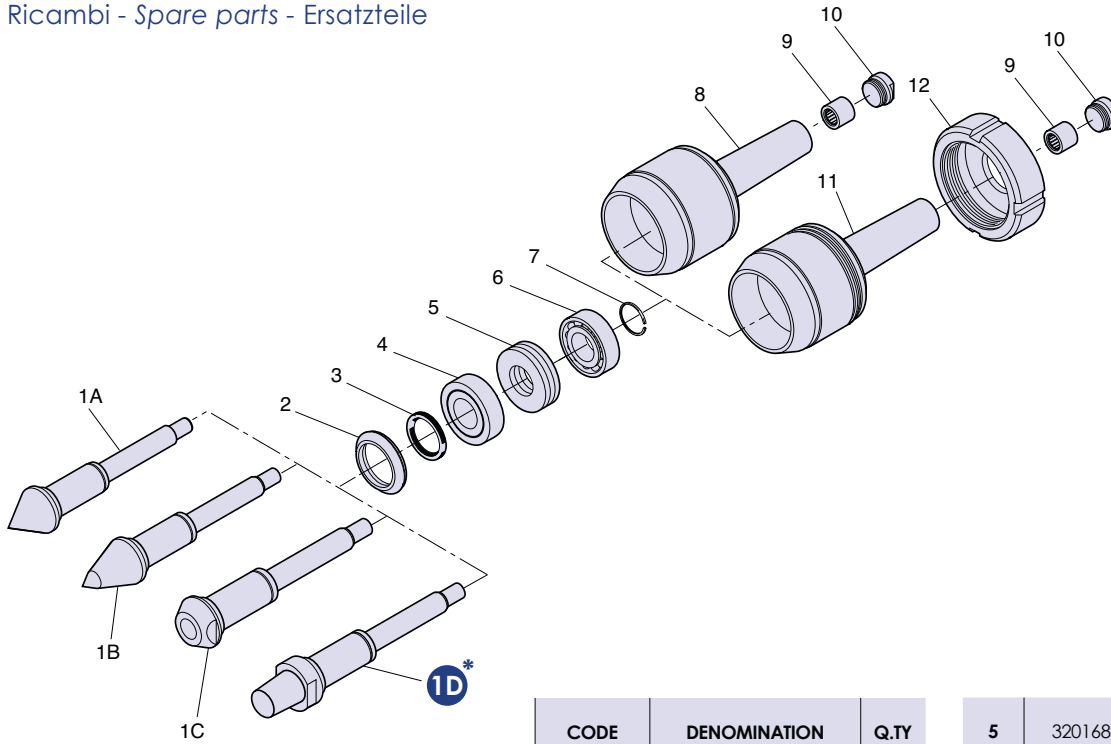


► Code **32026**

Carico max	daN 3800
Max load	
Max Belastung	
Eccentricità max	mm 0,010
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	2200
R.p.m.	
U/min	

► Code **G32026**

Con ghiera
 With ring nut
 Mit Abdrückmutter



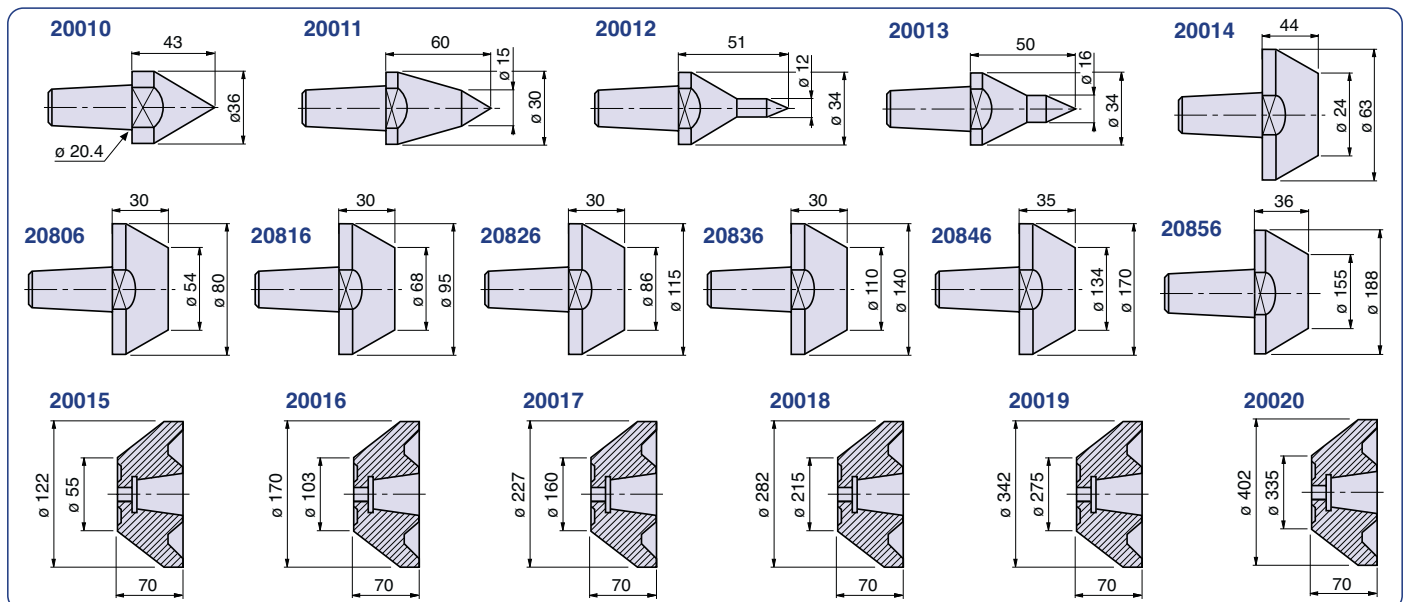
1D* Contropunta con albero 1D
Live center with shaft 1D
Körnerspitze mit Welle 1D

► Code **32006**

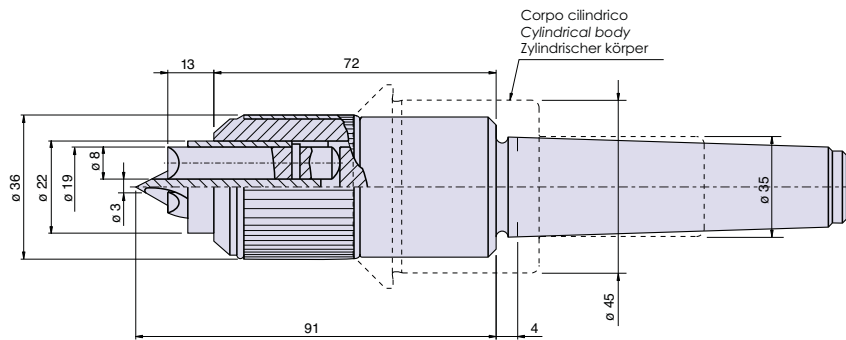
► Code **G32006**

Con ghiera
With ring nut
Mit Abdrückmutter

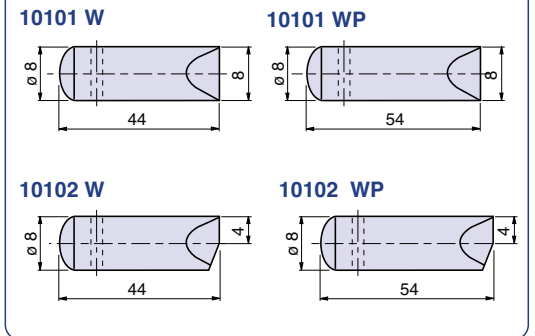
	CODE	DENOMINATION	Q.TY				
				5	320168	Cuscinetto Bearing - Lager	1
1A	320162	Albero Shaft - Welle	1	6	010035004	Cuscinetto Bearing - Lager	1
1B	320163	Albero Shaft - Welle	1	7	160035001	Anello Ring	1
1C	320164	Albero Shaft - Welle	1	8	320160	Corpo Body - Körper	1
1D	320061	Albero Shaft - Welle	1	9	080025002	Cuscinetto Bearing - Lager	1
2	300165	Coperchio Cover - Abdeckung	1	10	300166	Tappo Plug - Stopfen	1
3	150042001	Anello Ring	1	11	G320160	Corpo Body - Körper	1
4	040035001	Cuscinetto Bearing - Lager		12	310633	Ghiera Ring a-nut Abdrückmutter	



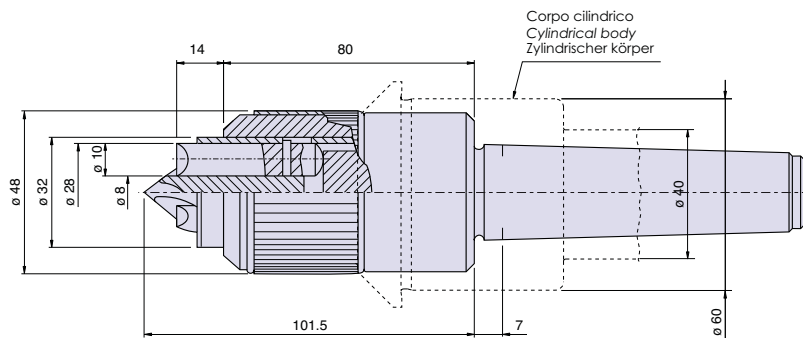
TYPE T/AW



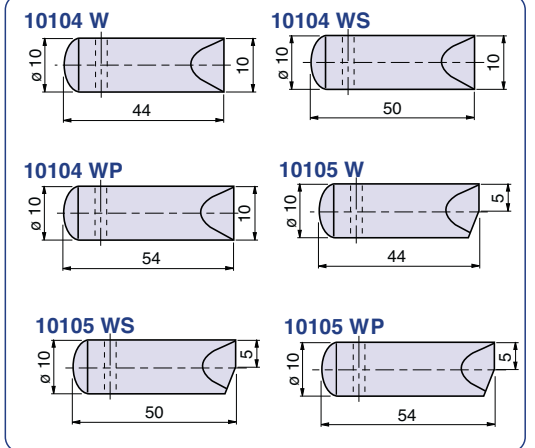
Artigli - Driving teeth - Mitnehmerbolzen



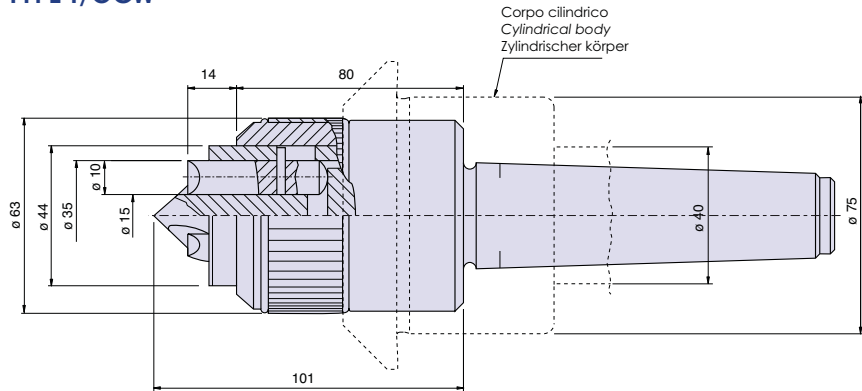
TYPE T/BW



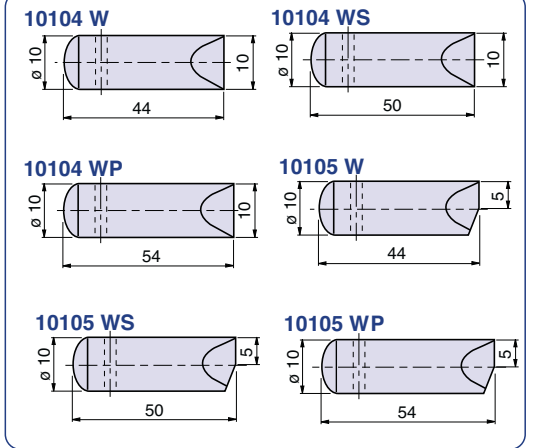
Artigli - Driving teeth - Mitnehmerbolzen



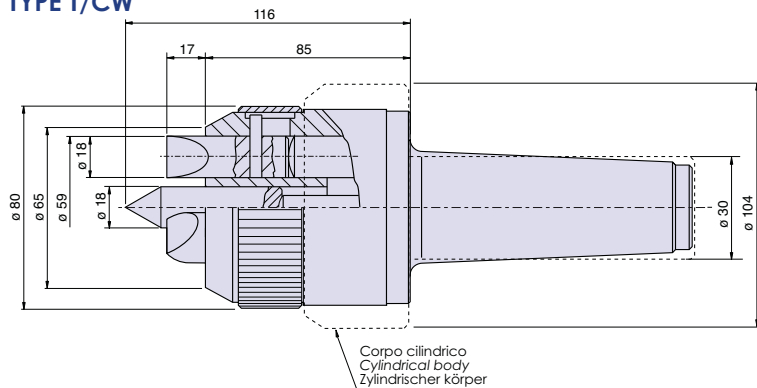
TYPE T/OCW



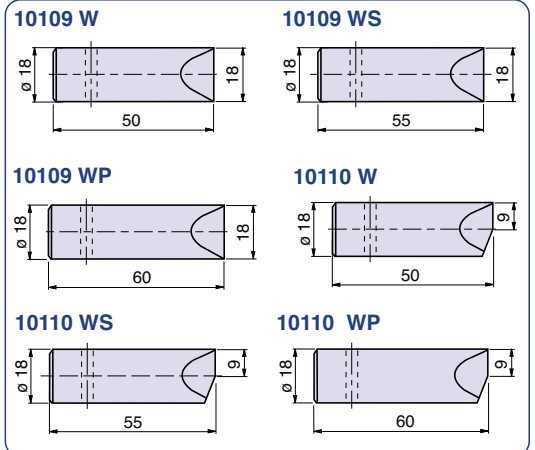
Artigli - Driving teeth - Mitnehmerbolzen



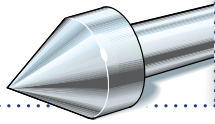
TYPE T/CW



Artigli - Driving teeth - Mitnehmerbolzen



Per elenco parti di ricambio, consultare da pag. 100 a pag. 107
For spare parts list, look from page 100 to page 107
Für liste Ersatzteile, finden Sie auf Seite 100 bis Seite 107



► WK ◀

**Contropunte rotanti
ad alta velocità**

**High speed
live centers**

**Mitlaufende Hochgeschwin-
digkeits Körnerspitze**



Le contropunte della serie WK risultano il miglior compromesso tra elevata precisione, ampia gamma di lavoro ed ottimo prezzo. Con il loro particolare sistema di assemblaggio, dove i cuscinetti sono posti direttamente sotto il carico che devono sopportare, garantiscono una assoluta rigidità. Particolarmente adatte per lavori di precisione e per la dentatura di ingranaggi.

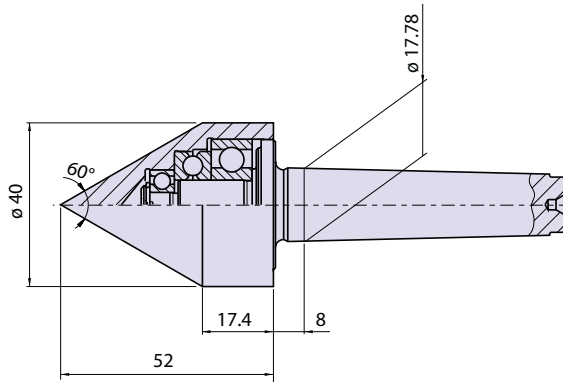
The WK series live centers are the perfect compromise between high precision, wide working range and excellent price.

Thanks to their particular assembly system, with the bearings positioned directly beneath the load to be supported, they ensure absolute rigidity. They are particularly suitable for grinding, precision turning and gear toothing.

Die Körnerspitzen der Baureihe WK sind der beste Kompromiss zwischen hoher Präzision, breitem Arbeitsbereich und ausgezeichnetem Preis. Dank ihres besonderem Zusammenbaus, bei dem die Lagern direkt unter der Last liegen, sichern sie eine absolute Steifigkeit. Sie sind besonders geeignet für das Schleifen, Genauigkeitsdrehen und für die Zahnradverzahnung.

Contropunta tipo WK2 (tipo normale) per cono morse 2
 Live center type WK2 (standard) for taper 2
 Körnerspitze Typ WK2 (Typ Normal) für Morsekegel 2

Code 90202

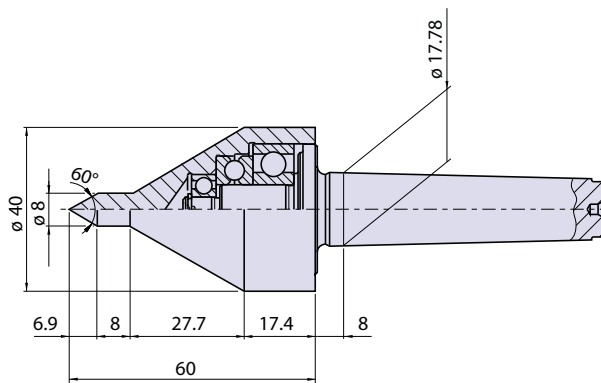


Carico max	daN 800
Max load	
Max Belastung	
Eccentricità max	mm 0,002
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	9000
R.p.m.	
U/min	

TYPE WK

Contropunta tipo WK12 (tipo con codolo) per cono morse 2
 Live center type WK12 (with shank) for taper 2
 Körnerspitze Typ WK12 (Typ mit speziellen End-Teil) für Morsekegel 2

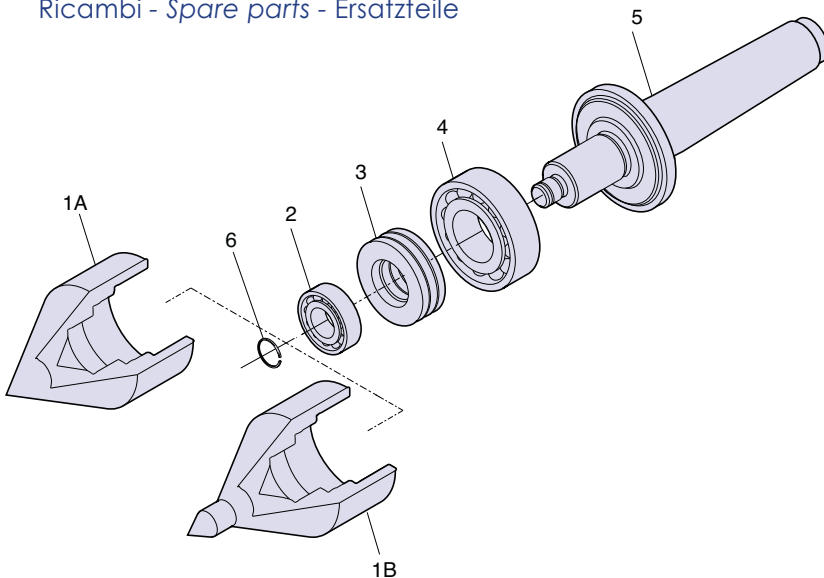
Code 90212



Carico max	daN 700
Max load	
Max Belastung	
Eccentricità max	mm 0,002
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	9000
R.p.m.	
U/min	

11 RETTIFICA

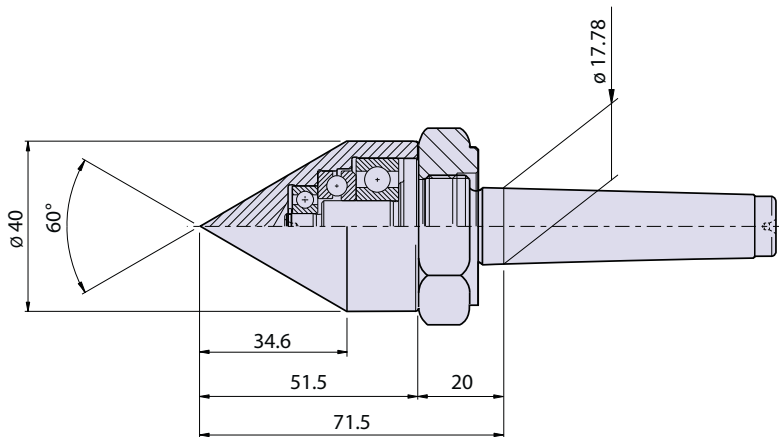
Ricambi - Spare parts - Ersatzteile



	CODE	DENOMINATION	Q.TY
1A	902021	Testa Head - Kopf	1
1B	902121	Testa Head - Kopf	1
2	01006002	Cuscinetto Bearing - Lager	1
3	050012001	Cuscinetto Bearing - Lager	1
4	010012004	Cuscinetto Bearing - Lager	1
5	902022	Corpo Body - Körper	1
6	160006001	Anello Ring	1

Contropunta tipo WK2 con ghiera per cono morse 2
 Live center type WK2 with ring nut for taper 2
 Körnerspitze Typ WK2 mit Abdrückmutter für Morsekegel 2

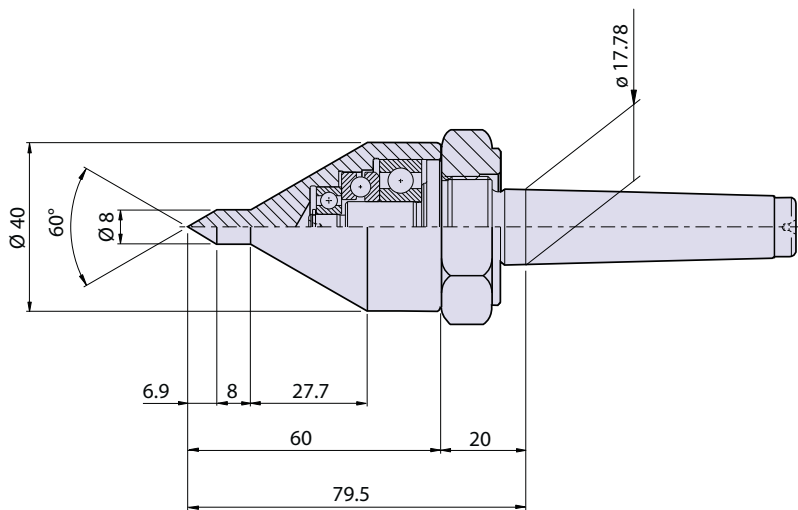
Code **G90202**



Carico max	daN 800
Max load	
Max Belastung	
Eccentricità max	mm 0,002
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	9000
R.p.m.	
U/min	

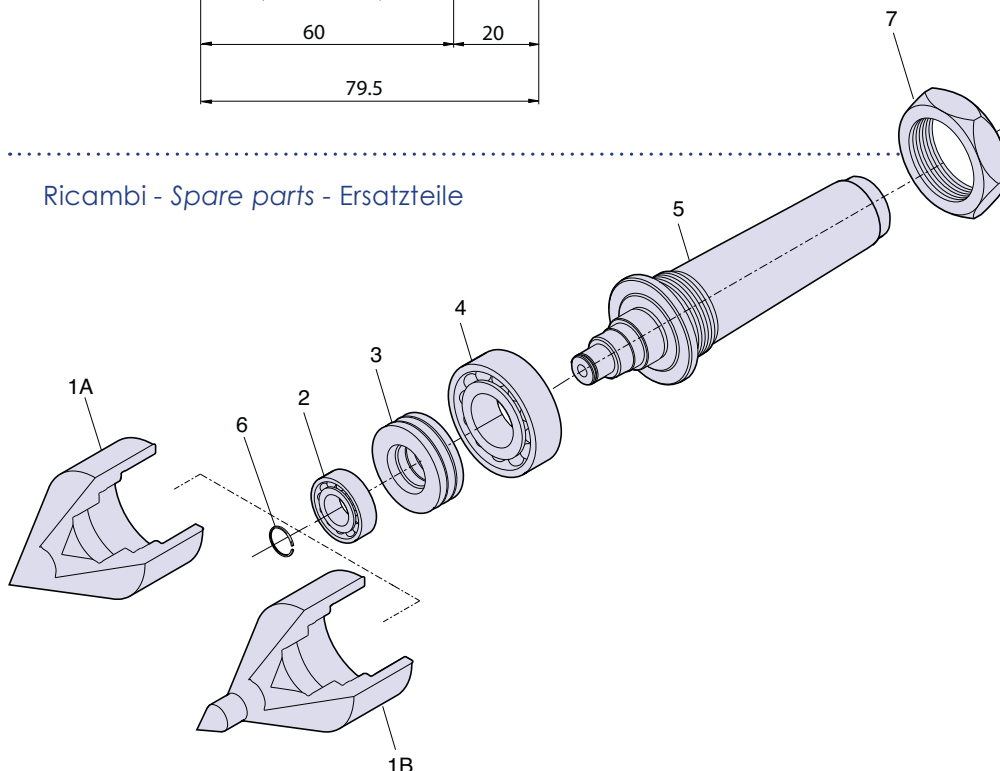
Contropunta tipo WK12 con ghiera
 Live center type WK12 with ring nut
 Körnerspitze Typ WK12 mit Abdrückmutter

Code **G90212**



Carico max	daN 700
Max load	
Max Belastung	
Eccentricità max	mm 0,002
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	9000
R.p.m.	
U/min	

Ricambi - Spare parts - Ersatzteile



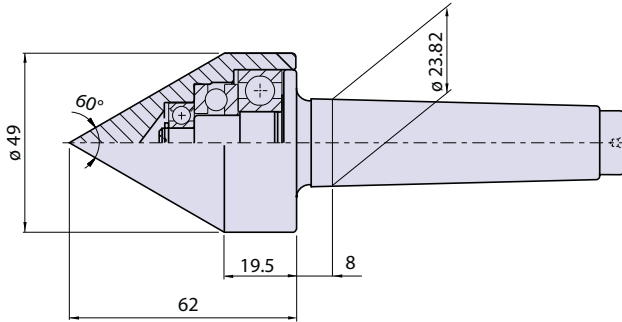
	CODE	DENOMINATION	Q.TY
1A	902021	Testa Head - Kopf	1
1B	902121	Testa Head - Kopf	1
2	010006002	Cuscinetto Bearing - Lager	1
3	050012001	Cuscinetto Bearing - Lager	1
4	010012004	Cuscinetto Bearing - Lager	1
5	G902022	Corpo Body - Körper	1
6	160006001	Anello Ring	1
7	901030	Ghiera Ring a-nut Abdrückmutter	1

11 RETTIFICA

Contropunta tipo WK3 (tipo normale) per cono morse 3
 Live center type WK3 (standard) for taper 3
 Körnerspitze Typ WK3 (Typ Normal) für Morsekegel 3

► Code **90203**

Carico max	daN 1100
Max load	
Max Belastung	
Eccentricità max	mm 0,002
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	8000
R.p.m.	
U/min	

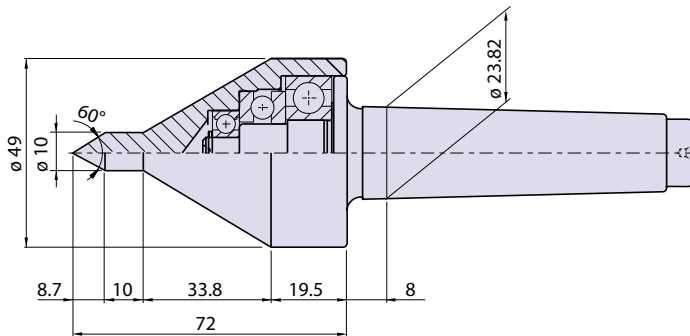


TYPE WK

Contropunta tipo WK13 (tipo con codolo) per cono morse 3
 Live center type WK13 (with shank) for taper 3
 Körnerspitze Typ WK13 (Typ mit speziellen End-Teil) für Morsekegel 3

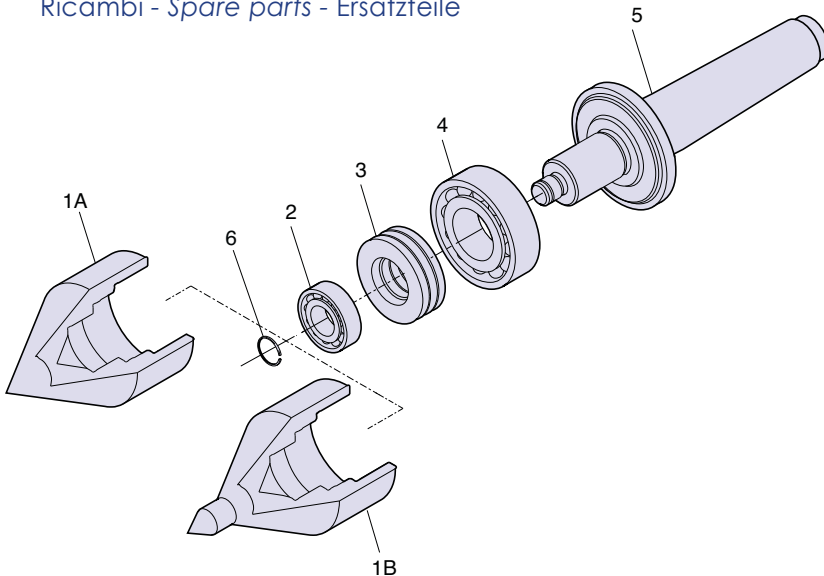
► Code **90213**

Carico max	daN 900
Max load	
Max Belastung	
Eccentricità max	mm 0,002
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	8000
R.p.m.	
U/min	



11 RETTIFICA

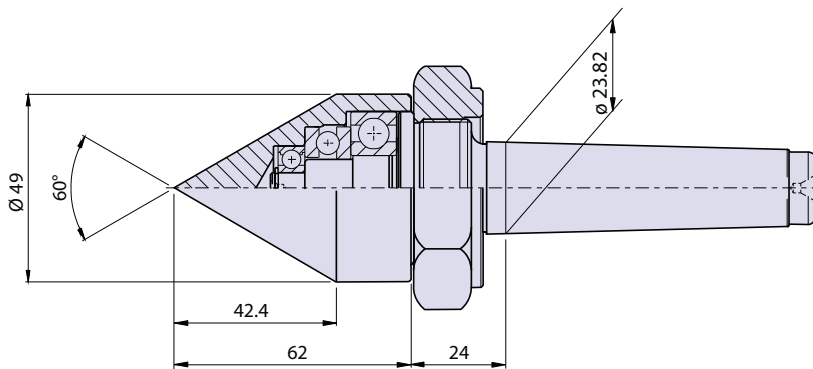
Ricambi - Spare parts - Ersatzteile



	CODE	DENOMINATION	Q.TY
1A	902031	Testa Head - Kopf	1
1B	902131	Testa Head - Kopf	1
2	010008002	Cuscinetto Bearing - Lager	1
3	050015002	Cuscinetto Bearing - Lager	1
4	010017004	Cuscinetto Bearing - Lager	1
5	902032	Corpo Body - Körper	1
6	160008002	Anello Ring	1

Contropunta rotante tipo WK3 per cono morse 3
 Live center typ WK3 for taper 3
 Mitlaufende Körnerspitze Typ WK3 für Morsekegel 3

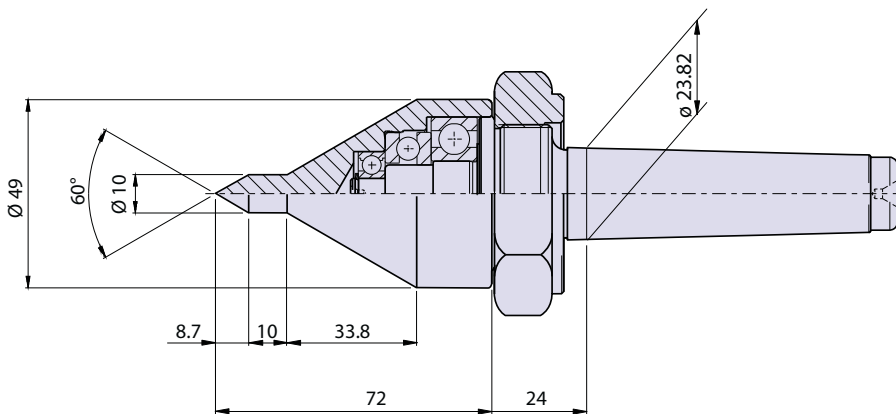
► Code **G90203**



Carico max	daN 1100
Max load	
Max Belastung	
Eccentricità max	mm 0,002
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	8000
R.p.m.	
U/min	

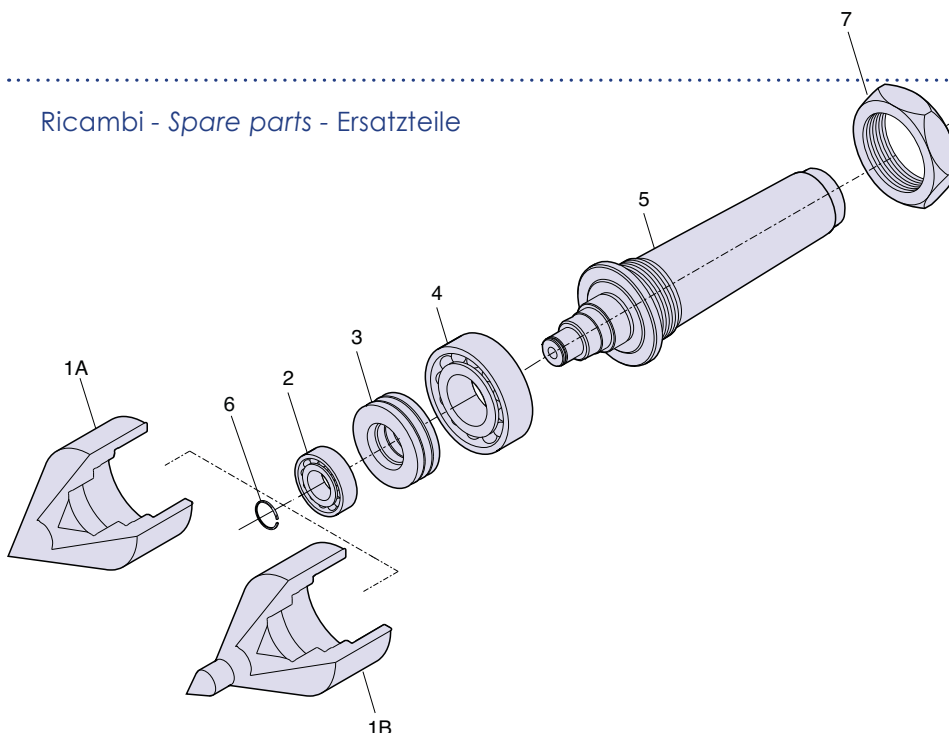
Contropunta rotante tipo WK13 per cono morse 3
 Live center type WK13 for taper 3
 Mitlaufende Körnerspitze Typ WK13 für Morsekegel 3

► Code **G90213**



Carico max	daN 900
Max load	
Max Belastung	
Eccentricità max	mm 0,002
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	8000
R.p.m.	
U/min	

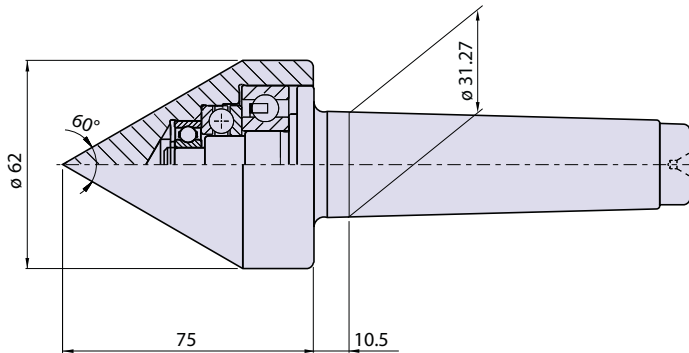
Ricambi - Spare parts - Ersatzteile



	CODE	DENOMINATION	Q.TY
1A	902031	Testa Head - Kopf	1
1B	902131	Testa Head - Kopf	1
2	010008002	Cuscinetto Bearing - Lager	1
3	050015002	Cuscinetto Bearing - Lager	1
4	010017004	Cuscinetto Bearing - Lager	1
5	902032G	Corpo Body - Körper	1
6	160008002	Anello Ring	1
7	901040	Ghiera Ring a-nut Abdrückmutter	1

Contropunta tipo WK4 (tipo normale) per cono morse 4
 Live center type WK4 (standard) for taper 4
 Körnerspitze Typ WK4 (Typ Normal) für Morsekegel 4

Code 90204

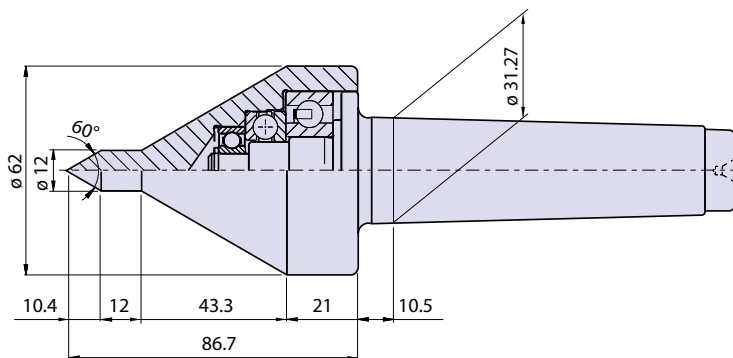


Carico max	daN 1500
Max load	
Max Belastung	
Eccentricità max	mm 0,002
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	7000
R.p.m.	
U/min	

TYPE WK

Contropunta tipo WK14 (tipo con codolo) per cono morse 4
 Live center type WK14 (with shank) for taper 4
 Körnerspitze Typ WK14 (Typ mit speziellen End-Teil) für Morsekegel 4

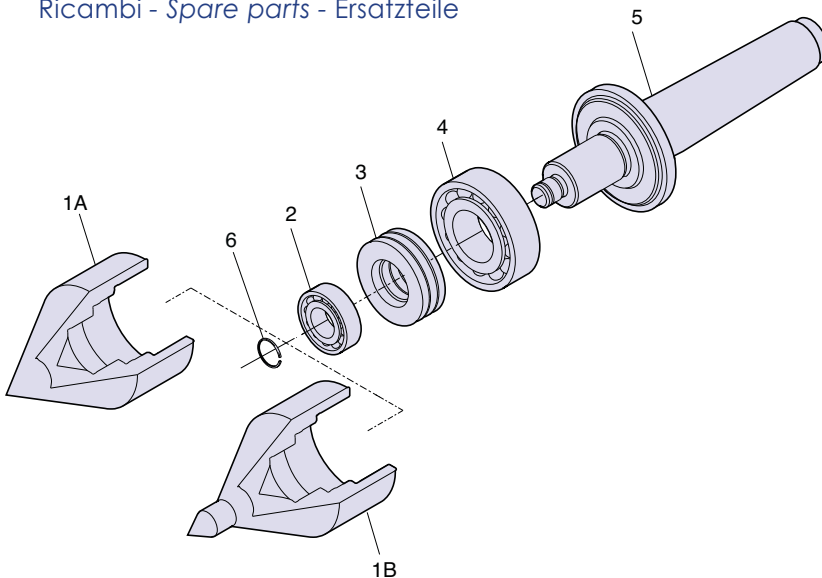
Code 90214



Carico max	daN 1150
Max load	
Max Belastung	
Eccentricità max	mm 0,002
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	7000
R.p.m.	
U/min	

11 RETTIFICA

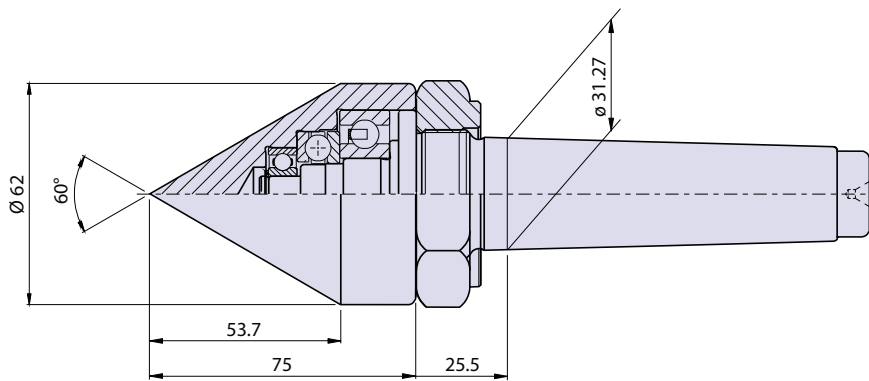
Ricambi - Spare parts - Ersatzteile



	CODE	DENOMINATION	Q.TY
1A	902041	Testa Head - Kopf	1
1B	902141	Testa Head - Kopf	1
2	010010002	Cuscinetto Bearing - Lager	1
3	050017002	Cuscinetto Bearing - Lager	1
4	010020004	Cuscinetto Bearing - Lager	1
5	902042	Corpo Body - Körper	1
6	160010001	Anello Ring	1

Contropunta tipo WK4 (tipo normale) per cono morse 4
 Live center type WK4 (standard) for taper 4
 Körnerspitze Typ WK4 (Typ Normal) für Morsekegel 4

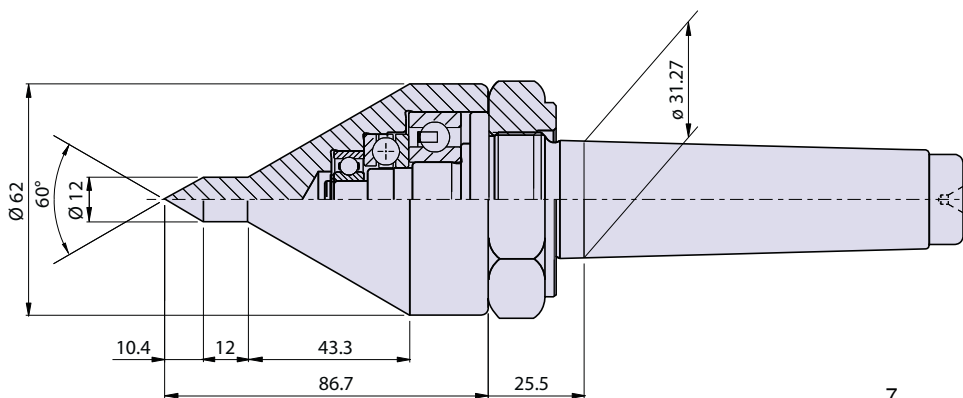
Code **G90204**



Carico max	daN 1500
Max load	
Max Belastung	
Eccentricità max	mm 0,002
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	7000
R.p.m.	
U/min	

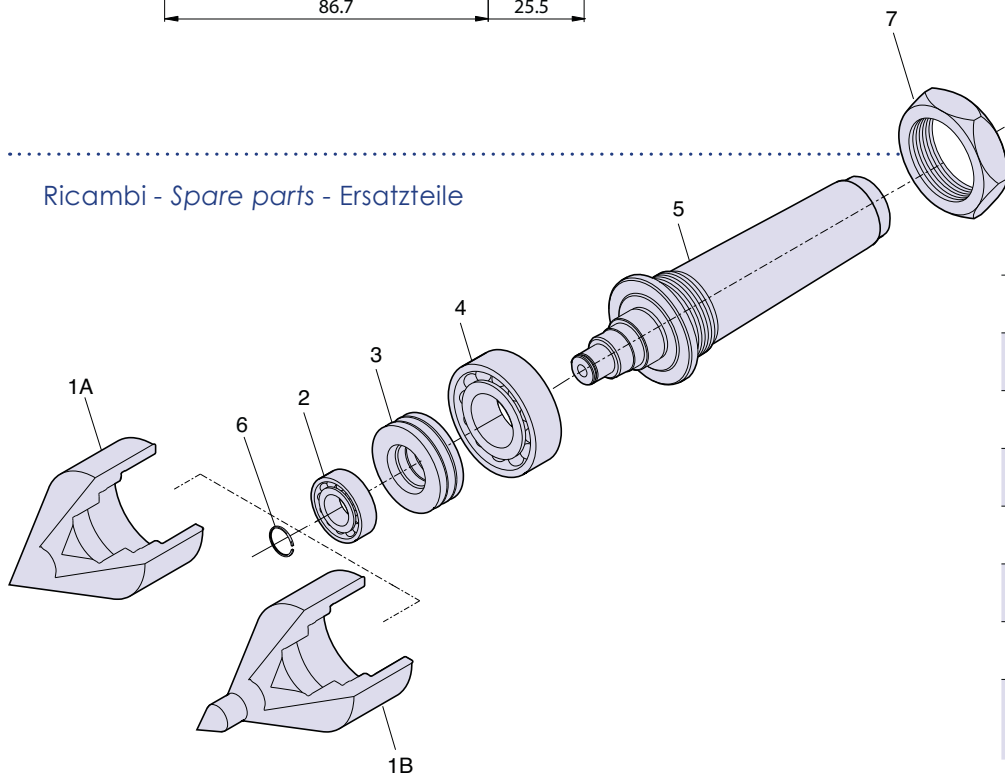
Contropunta tipo WK14 per cono morse 4
 Live center type WK14 for taper 4
 Körnerspitze Typ WK14 für Morsekegel 4

Code **G90214**



Carico max	daN 1150
Max load	
Max Belastung	
Eccentricità max	mm 0,002
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	7000
R.p.m.	
U/min	

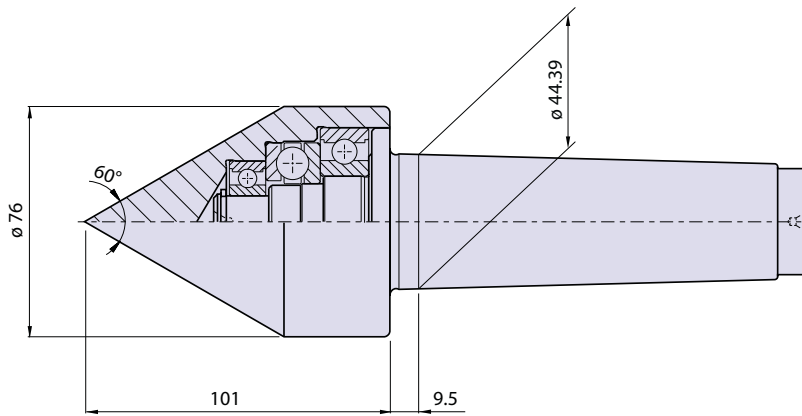
Ricambi - Spare parts - Ersatzteile



	CODE	DENOMINATION	Q.TY
1A	902041	Testa Head - Kopf	1
1B	902141	Testa Head - Kopf	1
2	010010002	Cuscinetto Bearing - Lager	1
3	050017002	Cuscinetto Bearing - Lager	1
4	010020004	Cuscinetto Bearing - Lager	1
5	G902042	Corpo Body - Körper	1
6	160010001	Anello Ring	1
7	901040	Ghiera Ring a-nut Abdrückmutter	1

Contropunta tipo WK5 (tipo normale) per cono morse 5
 Live center type WK5 (standard) for taper 5
 Körnerspitze Typ WK5 (Typ Normal) für Morsekegel 5

► Code **90205**

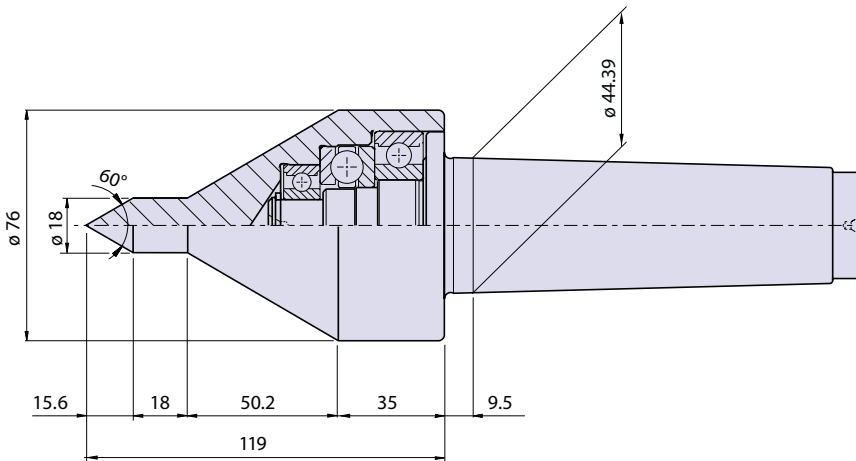


Carico max	daN 2400
Max load	
Max Belastung	
Eccentricità max	mm 0,002
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	5500
R.p.m.	
U/min	

TYPE WK

Contropunta tipo WK15 (tipo con codolo) per cono morse 5
 Live center type WK15 (with shank) for taper 5
 Körnerspitze Typ WK15 (Typ mit speziellen End-Teil) für Morsekegel 5

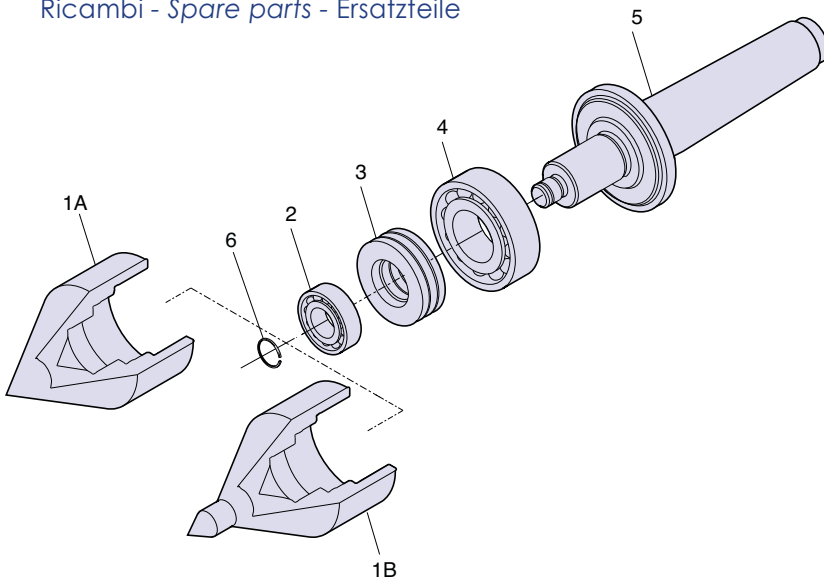
► Code **90215**



Carico max	daN 1800
Max load	
Max Belastung	
Eccentricità max	mm 0,002
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	5500
R.p.m.	
U/min	

11 RETTIFICA

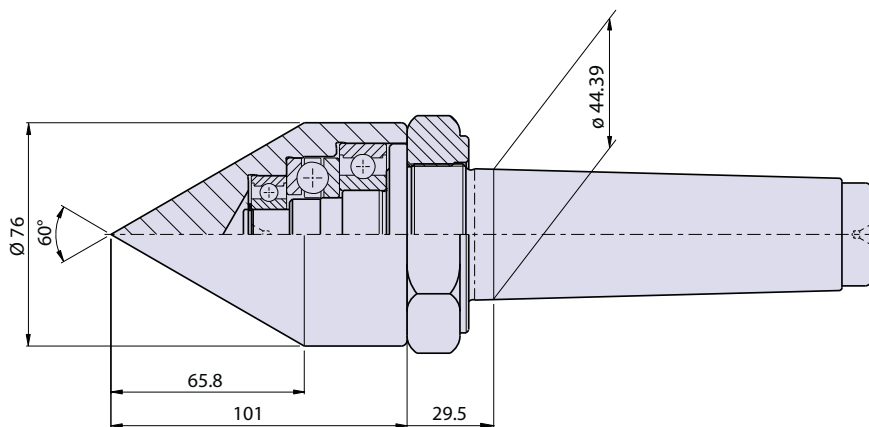
Ricambi - Spare parts - Ersatzteile



	CODE	DENOMINATION	Q.TY
1A	902051	Testa Head - Kopf	1
1B	902151	Testa Head - Kopf	1
2	010017004	Cuscinetto Bearing - Lager	1
3	050025004	Cuscinetto Bearing - Lager	1
4	010030005	Cuscinetto Bearing - Lager	1
5	902052	Corpo Body - Körper	1
6	160017001	Anello Ring	1

Contropunta tipo WK5 per cono morse 5
 Live center type WK5 for taper 5
 Körnerspitze Typ WK5 für Morsekegel 5

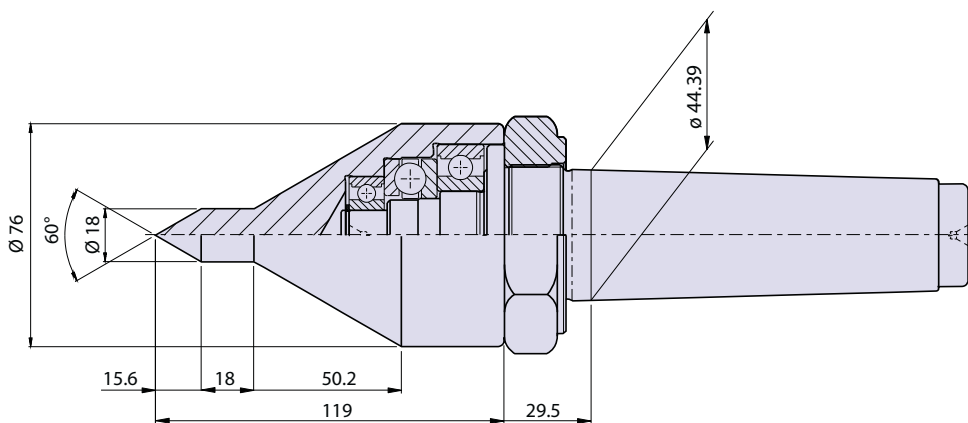
Code **G90205**



Carico max	daN 2400
Max load	
Max Belastung	
Eccentricità max	mm 0,002
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	5500
R.p.m.	
U/min	

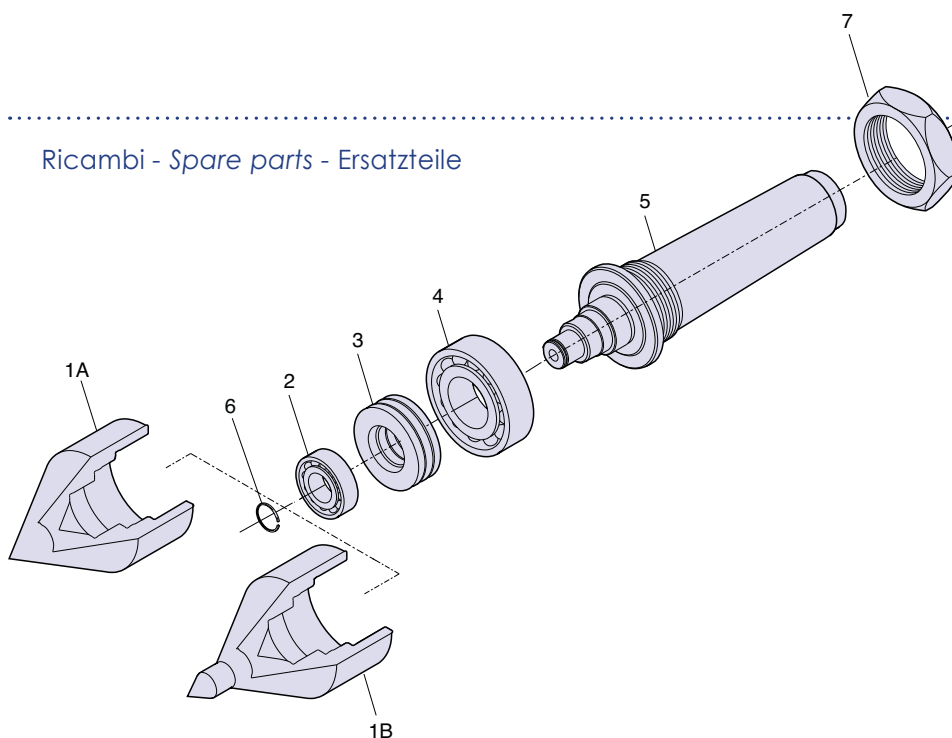
Contropunta rotante tipo WK15 per cono morse 5
 Live center type WK15 for taper 5
 Mitlaufende Körnerspitze Typ WK15 für Morsekegel 5

Code **G90215**



Carico max	daN 1800
Max load	
Max Belastung	
Eccentricità max	mm 0,002
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	5500
R.p.m.	
U/min	

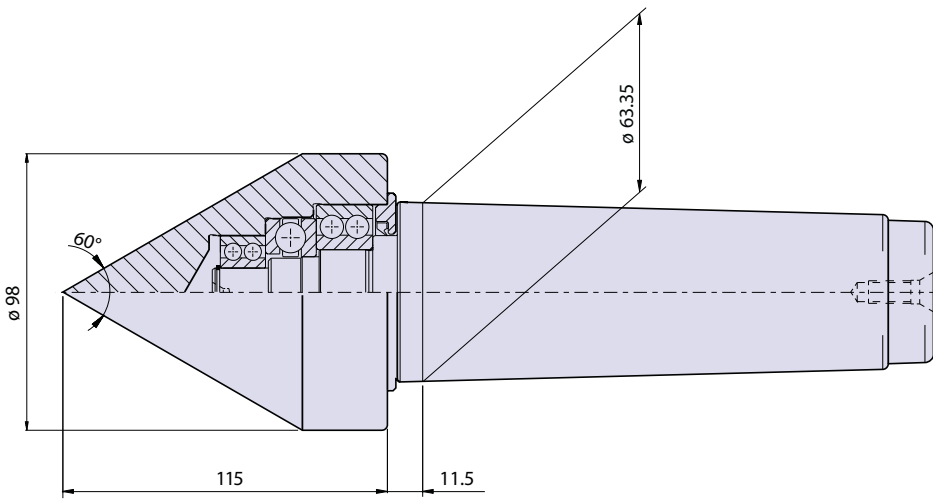
Ricambi - Spare parts - Ersatzteile



	CODE	DENOMINATION	Q.TY
1A	902051	Testa Head - Kopf	1
1B	902151	Testa Head - Kopf	1
2	010017004	Cuscinetto Bearing - Lager	1
3	050025004	Cuscinetto Bearing - Lager	1
4	010030005	Cuscinetto Bearing - Lager	1
5	902052G	Corpo Body - Körper	1
6	160017001	Anello Ring	1
7	901050	Ghiera Ring α-nut Abdrückmutter	1

Contropunta tipo WK6 (tipo normale) per cono morse 6
 Live center type WK6 (standard) for taper 6
 Körnerspitze Typ WK6 (Typ Normal) für Morsekegel 6

Code 90206



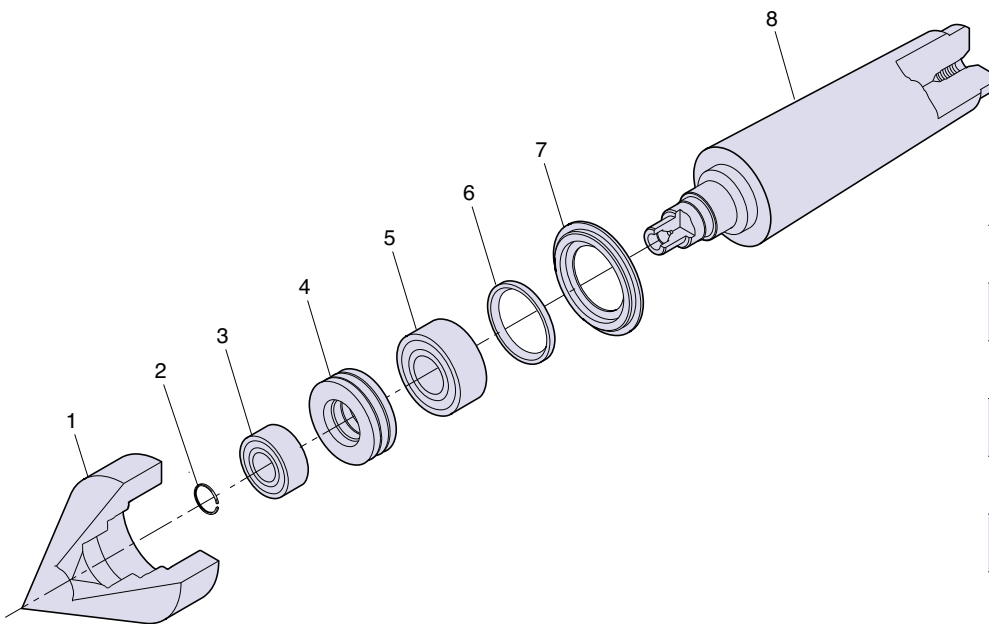
Carico max	daN 2800
Max load	
Max Belastung	
Eccentricità max	mm 0,002
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	4000
R.p.m.	
U/min	

TYPE WK

Dotata di anello di protezione per l'entrata di liquidi o polveri
 Equipped with protective ring to prevent the entry of liquid or dust
 Ausgestattet mit einem Schutzing, um das Eindringen von Flüssigkeit oder Staub zu verhindern.

11 RETTIFICA

Ricambi - Spare parts - Ersatzteile



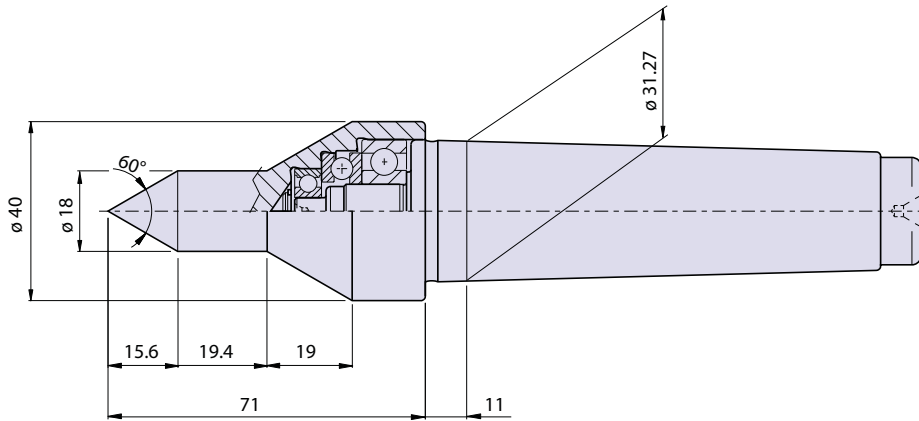
	CODE	DENOMINATION	Q.TY
1	902061	Testa Head - Kopf	1
2	160017001	Anello Ring	1
3	020017002	Cuscinetto Bearing - Lager	1
4	050025004	Cuscinetto Bearing - Lager	1
5	020030001	Cuscinetto Bearing - Lager	1
6	150040004	Coperchio Cover - Abdeckung	1
7	904063	Anello Ring	1
8	904062	Corpo Body - Körper	1

Contropunta tipo WK24 (tipo speciale), cono morse 4
 Live center type WK24 (special) for taper 4
 Körnerspitze Typ WK24 (Typ Spezial) für Morsekegel 4

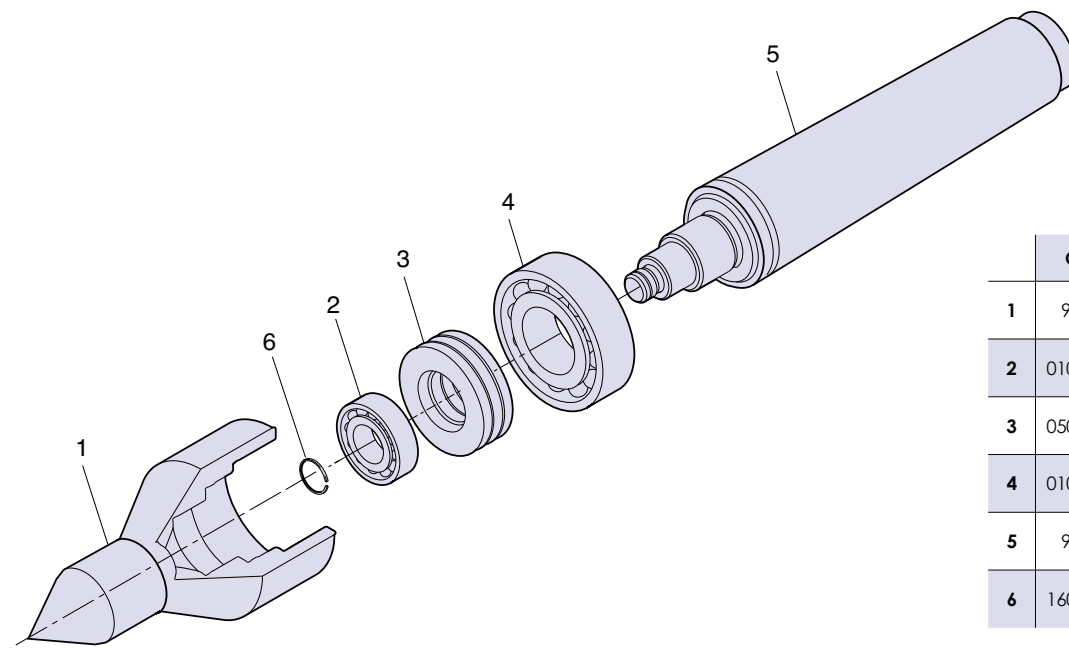
► **Code** **90412**

Solo su richiesta - Only on request - Nur Auf Anfrage

Carico max	daN 800
Max load	
Max Belastung	
Eccentricità max	mm 0,002
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	9000
R.p.m.	
U/min	



Ricambi - Spare parts - Ersatzteile



	CODE	DENOMINATION	Q.TY
1	904121	Punta Point - Spitze	1
2	010006002	Cuscinetto Bearing - Lager	1
3	050012001	Cuscinetto Bearing - Lager	1
4	010012004	Cuscinetto Bearing - Lager	1
5	904142	Corpo Body - Körper	1
6	160006001	Anello Ring	1

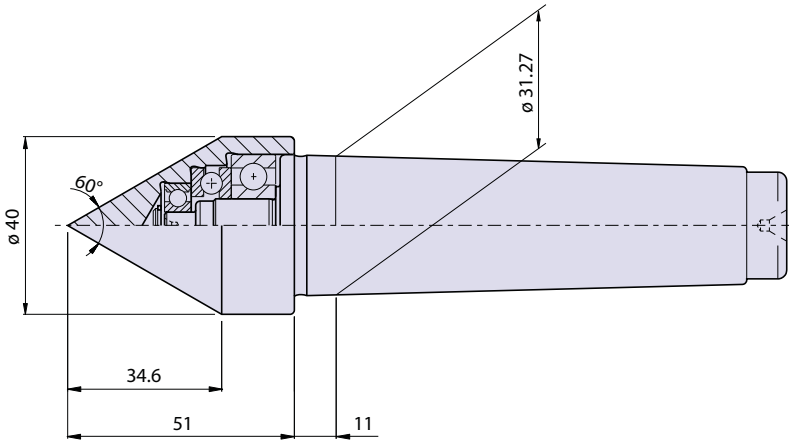
11 RETTIFICA

Contropunta tipo WK44 (tipo speciale), cono morse 4
 Live center type WK44 (special) for taper 4
 Körnerspitze Typ WK44 (Typ Spezial) für Morsekegel 4

Code 90414

Solo su richiesta - Only on request - Nur Auf Anfrage

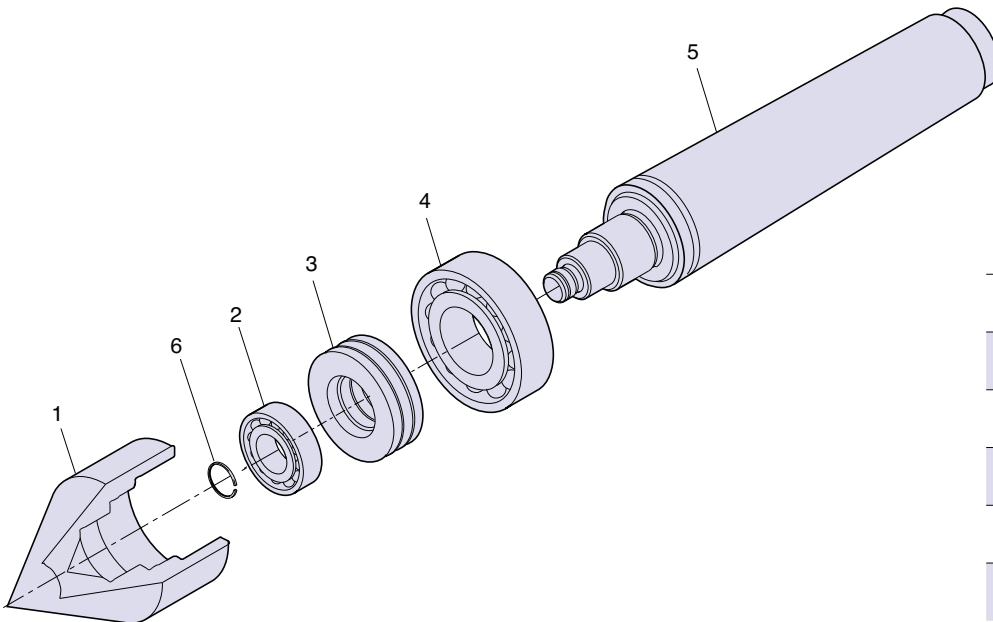
Carico max	daN 800
Max load	
Max Belastung	
Eccentricità max	mm 0,002
Max eccentricity	
Max Rundlaufabweichung	
Giri/1'	9000
R.p.m.	
U/min	



TYPE WK

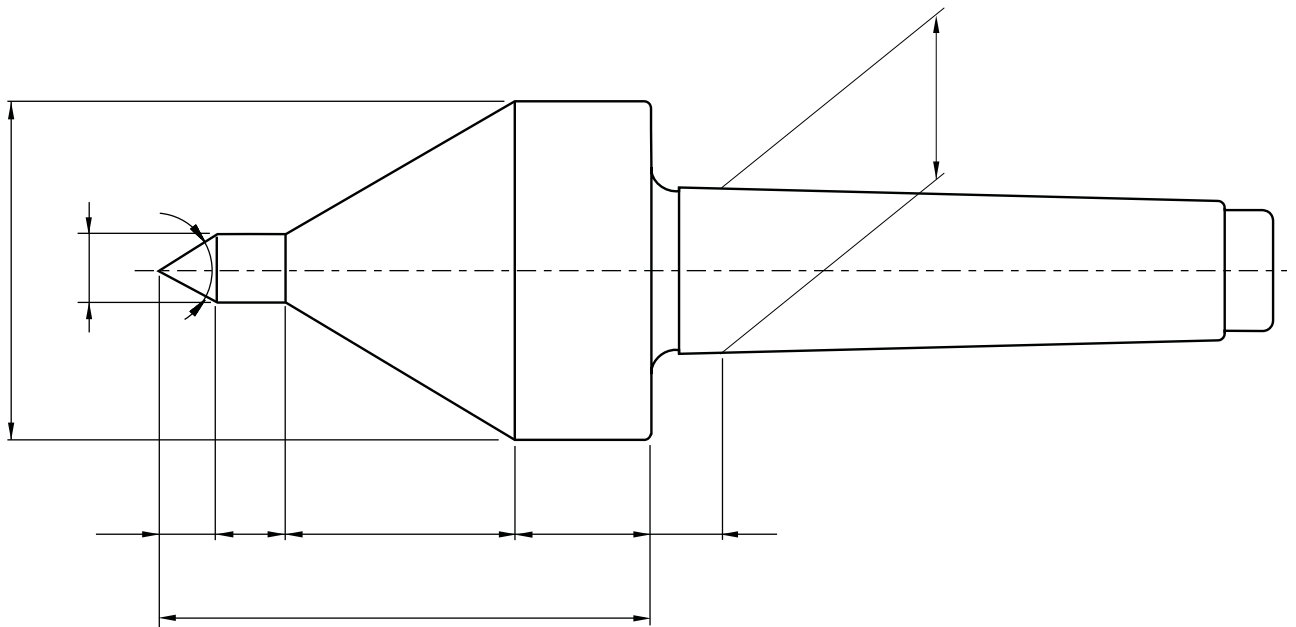
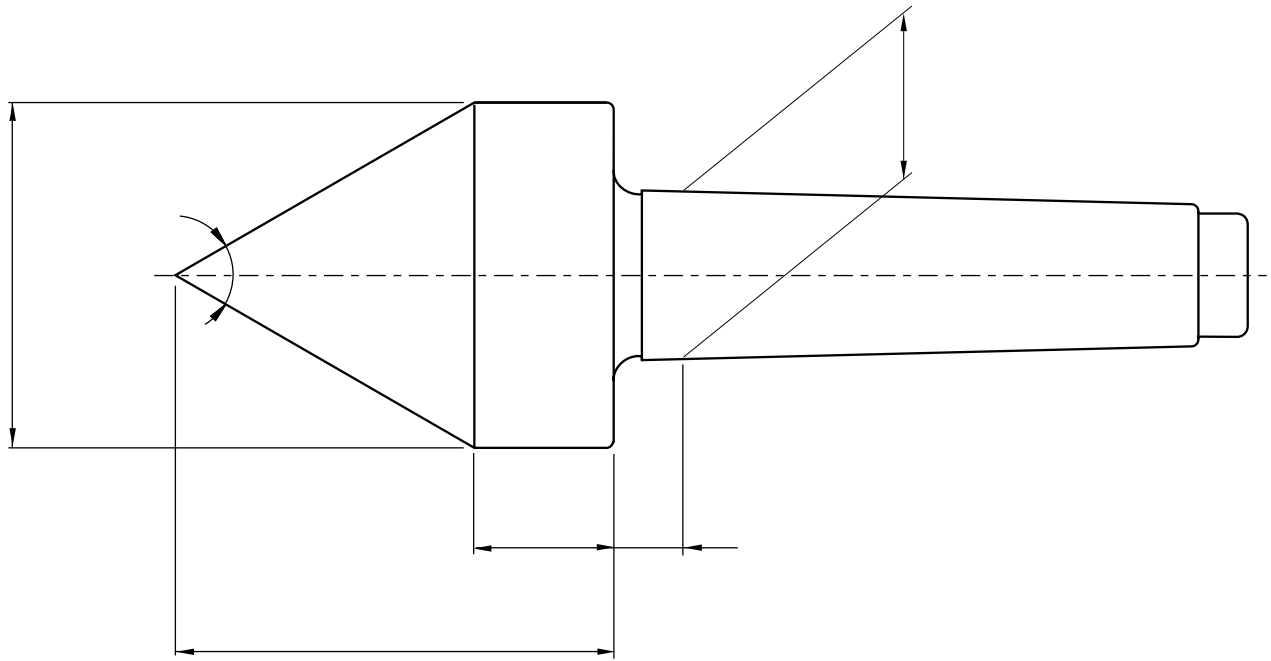
11 RETTIFICA

Ricambi - Spare parts - Ersatzteile



	CODE	DENOMINATION	Q.TY
1	902021	Punta Point - Spitze	1
2	010006002	Cuscinetto Bearing - Lager	1
3	050012001	Cuscinetto Bearing - Lager	1
4	010012004	Cuscinetto Bearing - Lager	1
5	904142	Corpo Body - Körper	1
6	160006001	Anello Ring	1

Contropunta - Live center - Körnerspitze



AZIENDA
COMPANY
FIRMA

DATA
DATE
DATUM

CODE

QUANTITÀ
QUANTITY
STÜCKZAHL

DATA CONSEGNA
DELIVERY DATE
LIEFERDATUM

MITTENTE
NAME

TEL.

FAX

NOTE



Brida pneumomeccanica

Pneumo-mechanical vice

Druckmechanisches Drehherz



Funziona con la chiusura meccanica e apertura pneumatica. Questa condizione ha il vantaggio di mantenere sempre il pezzo con una presa corretta, anche in caso di un calo di pressione nel circuito dell'aria.

This operates by mechanical closing and pneumatic opening. This system has the advantage of maintaining the piece in the correct position, even if there is a pressure drop in the air circuit.

Funktioniert mit mechanischer Schließung und pneumatischer Öffnung. Diese Bedingung hat den Vorteil, dass das Werkstück stets in einer korrekten Position gehalten wird, auch bei einem Druckabfall im Luftkreis.

► Patent Nr. 1367759 ◀

Brida pneumomeccanica

Pneumo-mechanical vice

Druckmechanisches Drehherz

DATI TECNICI

- Punta di centramento fissa
- Prese del pezzo con 3 morsetti
- Bloccaggio coassiale con punta fissa di centramento anche su pezzi grezzi
- Campo di lavoro per macchine a C.N.C. robotizzate o manuali

TECHNICAL DATA

- Dead centering nose
- Workpiece grip by means of three hardened clamps
- Coaxial clamping with dead centering nose even on blanks
- Work field suitable for robot or manual computerized numeric al control machines

TECHNISCHE DATEN

- Feste Zentrierspitze
- Spannung des Werkstücks durch 3 Spannbacken
- Koaxiale Einspannung mit fester Zentrierspitze auch für Rohlinge
- Einsatz auf allen CNC - gesteuerten Maschinen mit automatischer oder manueller Beschickung

► Code	X	L1
BRD-02-00CM3	23,825	125
BRD-02-00CM4	31,267	127,5
BRD-02-00CM5	44,399	127,5



N.B.: si eseguono studi per applicazioni speciali
 Note: Special applications can be studied on request
 Notiz: Es werden Studien für Sonderanwendungen ausgeführt.

DATI TECNICI

- Disponibili con cono morse 3, 4 e 5
- Campo di bloccaggio da Ø 10 Ø 55 mm
- Pressione di esercizio:
 - 10 ÷ 30 mm → 3 - 4 bar
 - 30 ÷ 35 mm → 4 - 6 bar
- Precisione di eccentricità: 0,0015 mm max.

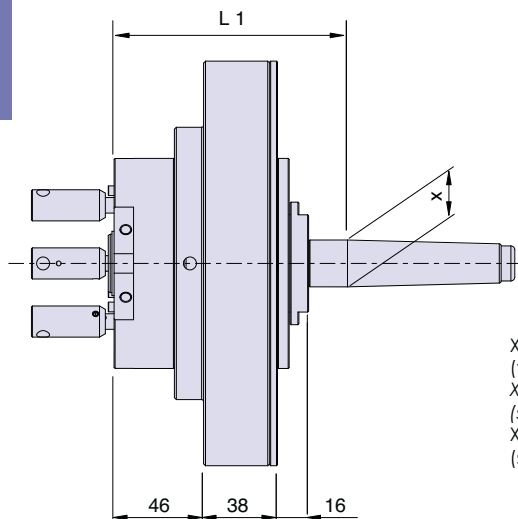
TECHNICAL DATA

- Available with Morse taper sleeve 3, 4 and 5
- Clamping range: Ø 10 Ø 55 mm
- Working pressure:
 - 10 ÷ 30 mm → 3 - 4 bar
 - 30 ÷ 35 mm → 4 - 6 bar
- Maximum eccentricity accuracy: 0,0015 mm max.

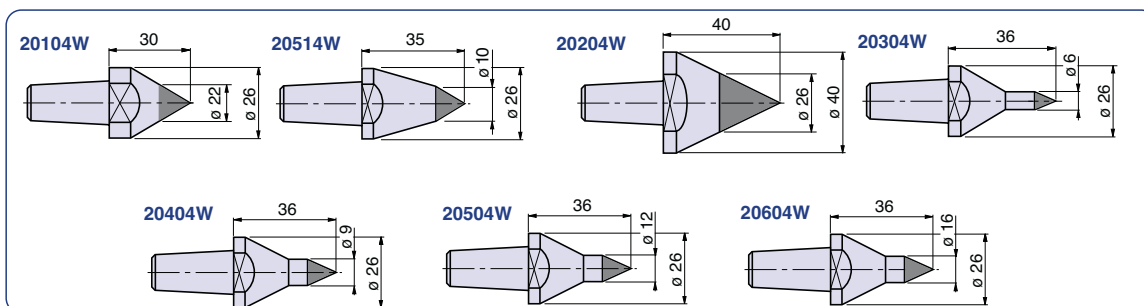
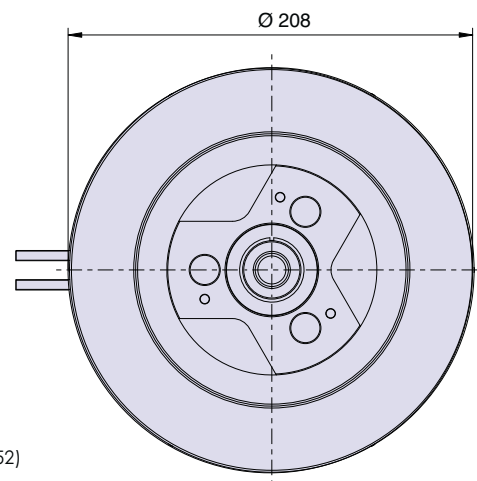
TECHNISCHE DATEN

- Mit Morsekegel 3, 4 und 5 lieferbar
- Spannungsbereich von Ø 10 bis Ø 55 mm
- Betriebsdruck:
 - 10 ÷ 30 mm → 3 - 4 bar
 - 30 ÷ 35 mm → 4 - 6 bar
- Rundlaufabweichung: 0,0015 mm max.

12 RETIFICA



X = Valido per cono morse 3, 4 o 5
 (vedi unificazione cono morse pag. 52)
 X = applicable to Morse taper 3, 4 or 5
 (see Morse taper unification page 52)
 X = gültig für Morsekegel 3, 4 oder 5
 (siehe Gesamtdarstellung des Morsekegels Seite 52)



Articoli disponibili con punta in metallo duro
 Items available with carbide
 Artikel erhältlich mit Hartmetallspitze