serie T

teste multiple a giunti universali
adjustable joint multispindle heads

Le teste multiple a giunti universali sono in produzione dal 1961; nel corso degli anni hanno subito modifiche e aggiornamenti, confermando però la validità dell'idea e lasciando inalterate le caratteristiche salienti:

- possibilità di utilizzo sia in foratura che in maschiatura
- possibilità di posizionamento nello spazio dei gruppi mandrino, vincolato soltanto dalle dimensioni dello stesso e dall'area di lavoro
- adattabilità a tutti i tipi di trapani o a soluzioni speciali
- vantaggiose soprattutto quando è necessario modificare di frequente gli interassi dei fori
- ampia gamma di modelli per le diverse esigenze

Sono disponibili a magazzino le seguenti versioni:

- serie T-TS a base circolare per l'esecuzione di massimo 12 fori; massima capacità di foratura diam. mm 22, interasse minimo mm 15 e massimo mm 350
- serie TL a base lineare per l'esecuzione di massimo 12 fori; massima capacità di foratura diam. mm 22, interasse minimo mm 17 e massimo mm 610
- serie TR a base rettangolare per l'esecuzione di massimo 16 fori; massima capacità di foratura diam. mm 22, interasse minimo mm 32 e massimo mm 395x345
- serie TM-TRM a base circolare e rettangolare per l'esecuzione di massimo 26 fori; grazie alle loro caratteristiche tecniche possono eseguire i più diversi schemi di foratura e maschiatura su macchine con potenza adeguata.

Il catalogo è congegnato per avere un preciso riscontro delle caratteristiche di tutte le teste a giunti universali e delle varie soluzioni possibili con esse; le nuove schede tecniche, gli esempi di attrezzature, gli accessori e le tabelle Vi guideranno nella scelta opportuna.
Qualora il Vs. lavoro non sia eseguibile con questa serie di teste, il Ns. ufficio tecnico Vi fornirà la soluzione alternativa con la serie VH ad interassi variabili o con teste ad assi fissi appositamente disegnate e costruite.

The universal joint multispindle heads have been in production since 1961; over the years they have been modified and updated, without however refuting the goodness of the idea and always leaving major features unaltered:

- *possibility of using for both drilling and tapping*
- *possibility of multi-positioning the spindle units, restricted only by the size of the spindle and of the working area*
- *suitable for all types of drills or for special solutions*
- *especially useful when the need arises to frequently change the hole centre distances*
- *broad range of models for different requirements*

The following versions are in stock:

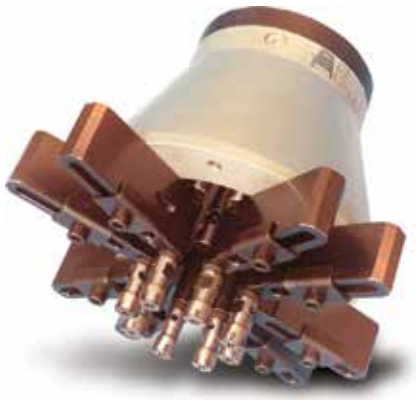
- *series T-TS with round base for making up to 12 holes; max drilling capacity dia. 22 mm, minimum centre distance 15 mm, max centre distance 350 mm*
- *series TL with linear base for making up to 12 holes; max drilling capacity dia. 22 mm, minimum centre distance 17 mm, max centre distance 610 mm*
- *series TR with rectangular base for making up to 16 holes; max drilling capacity dia. 22 mm, minimum centre distance 32 mm, max centre distance 395x345 mm*
- *series TM-TRM with round and rectangular base for making up to 26 holes; thanks to their technical features, they are able to execute a series of different drilling and tapping patterns on machines of adequate power.*

The catalogue is compiled so as to provide a precise reference for all the adjustable joint heads and the various possible solutions these offer. Thanks to the new technical sheets, equipment examples, accessories and charts, you will find making the right choice much easier.
In the event of this series of heads not providing the solution for your job, our technical department can provide alternative solutions with the variable centre distance VH series or fixed-axis heads, specially designed and made for you.

T2 9-2
T4 9-3
T7 9-4
T10 9-5
T12/TS12 9-6
T15/TS15 9-7
T18/TS18 9-8
T22/TS22 9-9
TL20/4 9-10
TL20/6 9-11
TL20/8 9-12
TL40/12 9-13
TL40/16 9-14
TL40/22 9-15
TL60/12 9-16
TL60/16 9-17
TL60/22 9-18
TR2/12 9-19
TR2/16 9-20
TR5/12 9-21
TR5/16 9-22
TR8/22 9-23
TM400 9-24
TM500 9-25
TRM43 9-26
TRM73 9-27
TRM43-2P 9-28
TRM73-2P 9-29
Mandrini per TM-TRM/*TM-TRM spindles* ... 9-30
Attrezzature/*Equipment* 9-32
Manicotto di collegamento/*Connection collar* .. 9-34

Accessori/*Accessories* 11-1

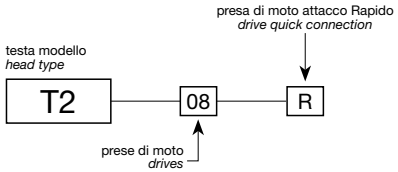
T2

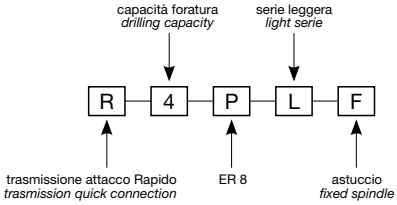


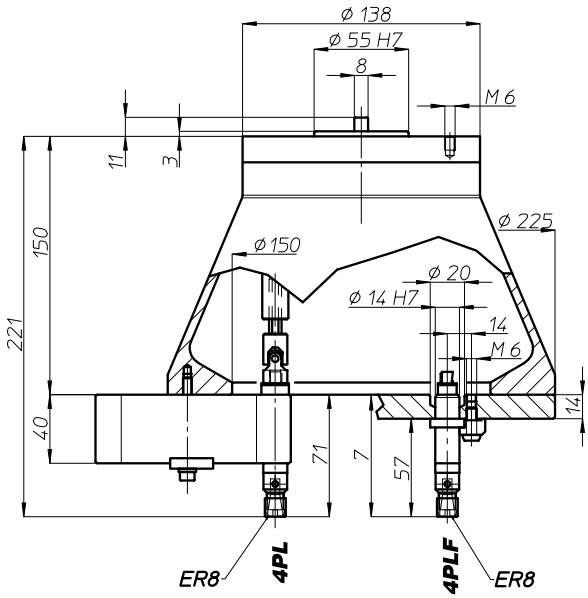
N° prese di moto *Nr. spindle drives*	08
Rapporto *Ratio*	1-1
Capacità di foratura *Drilling capacity*	4
Maschiatura *Tapping*	M4
Attacco utensile *Type of spindle*	ER8
Peso gruppo testa *Head weight*	Kg 3,25
Peso gruppo mandrino *Spindle-set weight*	Kg 0,3

Codice testa
Head code

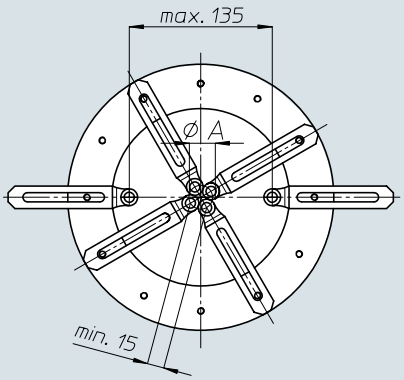
Codice mandrino
Spindle code



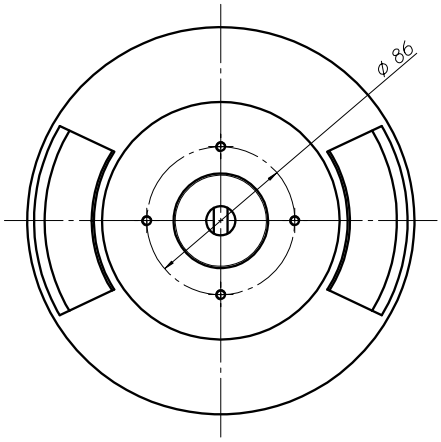




area di lavoro
working area

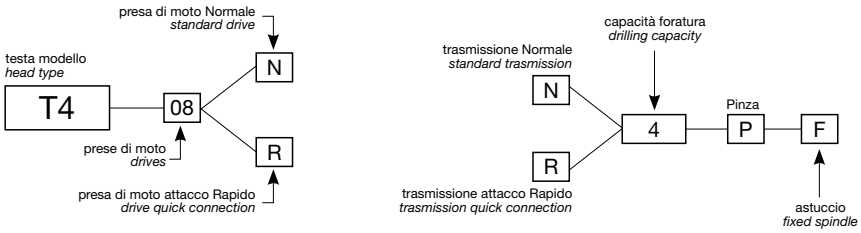


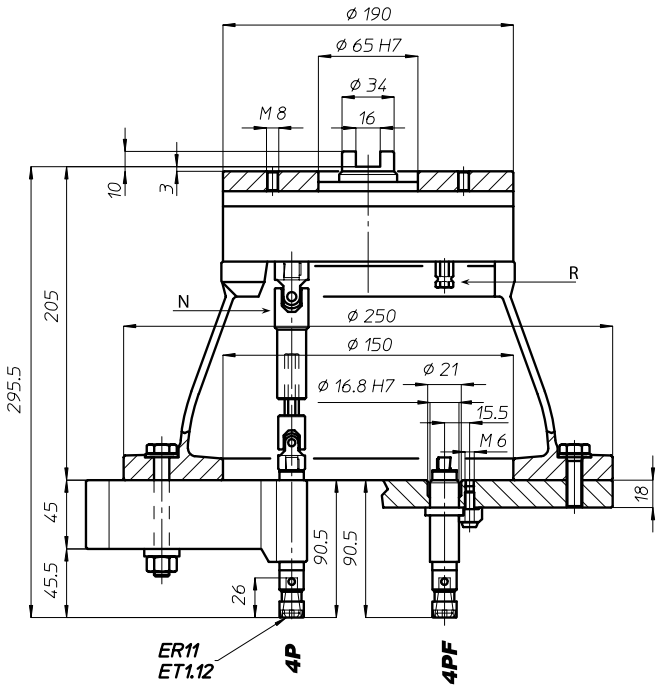
ø A	n° mandrini *n° spindles*
15	2
17,5	3
21,5	4
26	5
30	6
35	7
39,5	8

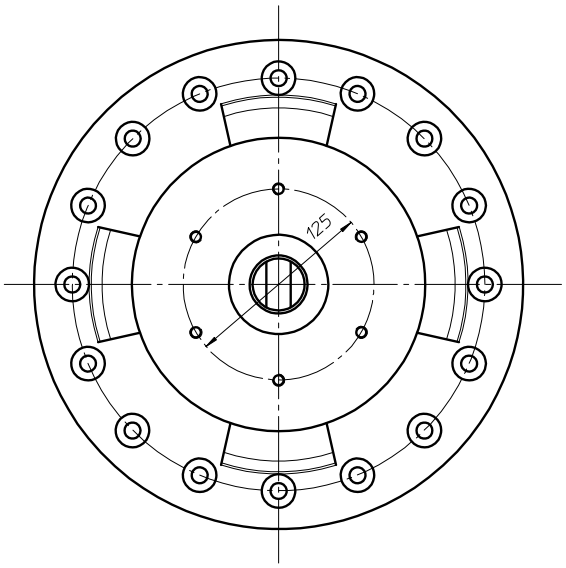


T4

Codice testa *Head code*	Codice mandrino *Spindle code*

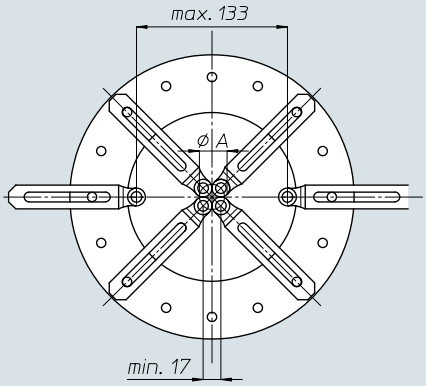






	N° prese di moto *Nr. spindle drives*	08
	Rapporto *Ratio*	1-1
	Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 4 5
	Maschiatura *Tapping*	M4
	Attacco utensile *Type of spindle* P	 ER11
	Peso gruppo testa *Head weight*	Kg 9,5
	Peso gruppo mandrino *Spindle-set weight*	Kg 1

area di lavoro
working area

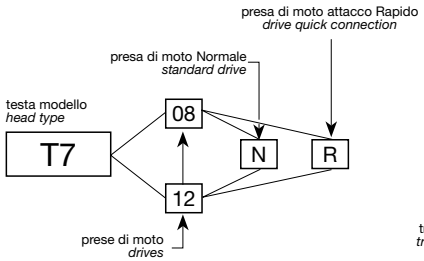


ø A	n° mandrini *n° spindles*
20	3
24,5	4
29,5	5
34,5	6
39,5	7
45	8

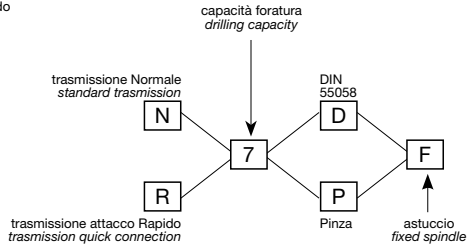
T7

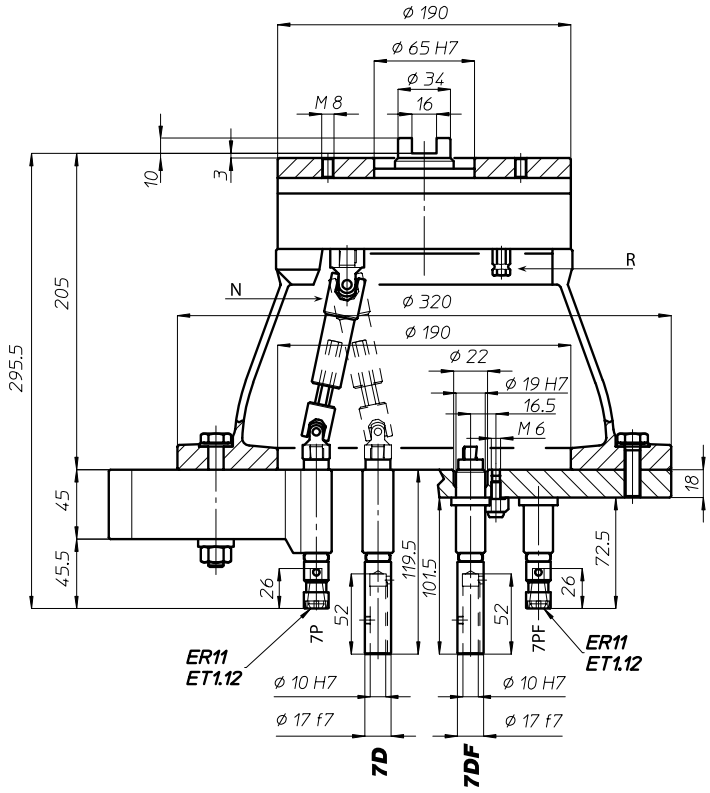
N° prese di moto *Nr. spindle drives*	08-12
Rapporto *Ratio*	1-1
Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 6 7
Maschiatura *Tapping*	M5
Attacco utensile *Type of spindle* D P	 DIN 55058 Ø10 ER11
Peso gruppo testa *Head weight*	Kg 10
Peso gruppo mandrino *Spindle-set weight*	Kg 1,1

Codice testa
Head code

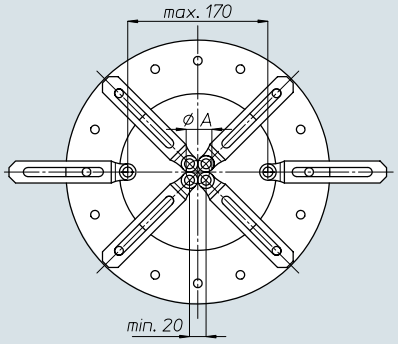


Codice mandrino
Spindle code

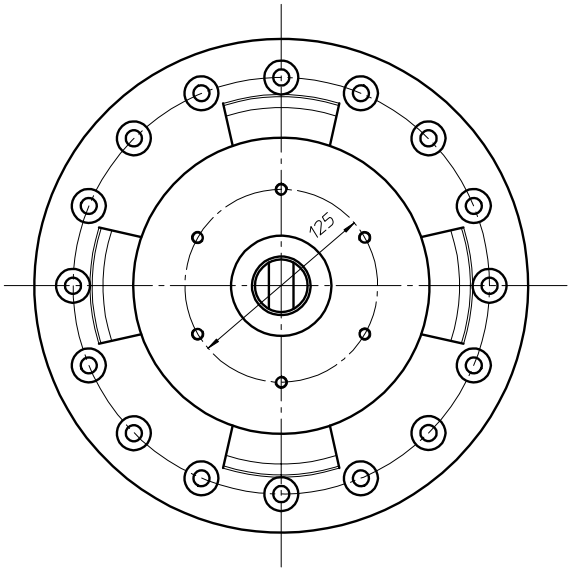




area di lavoro
working area

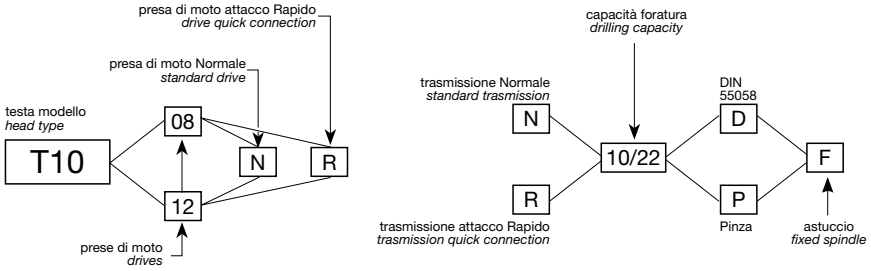


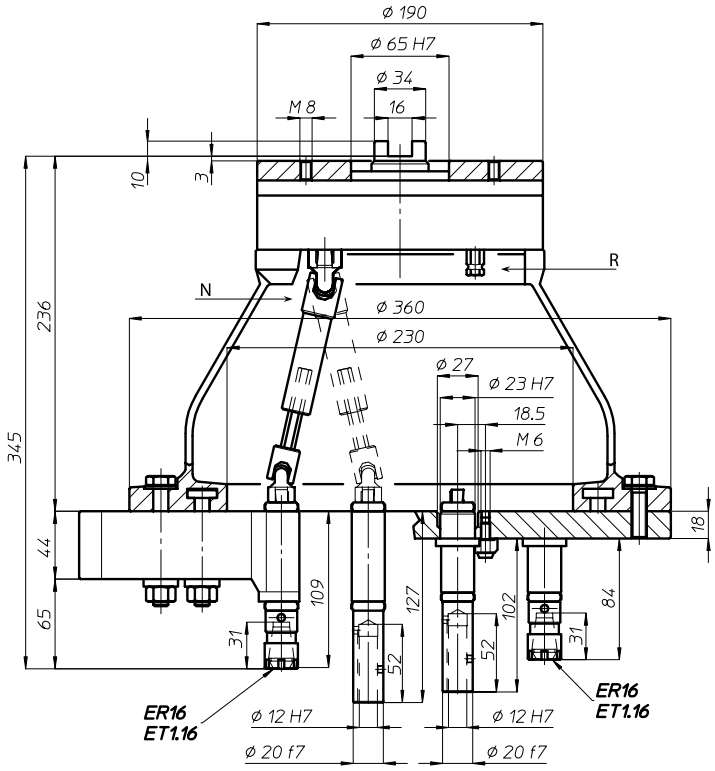
ø A	n° mandrini *n° spindles*
23,5	3
28,5	4
34,5	5
40,5	6
46,5	7
52,5	8
59	9
65,5	10
71,5	11
77,5	12

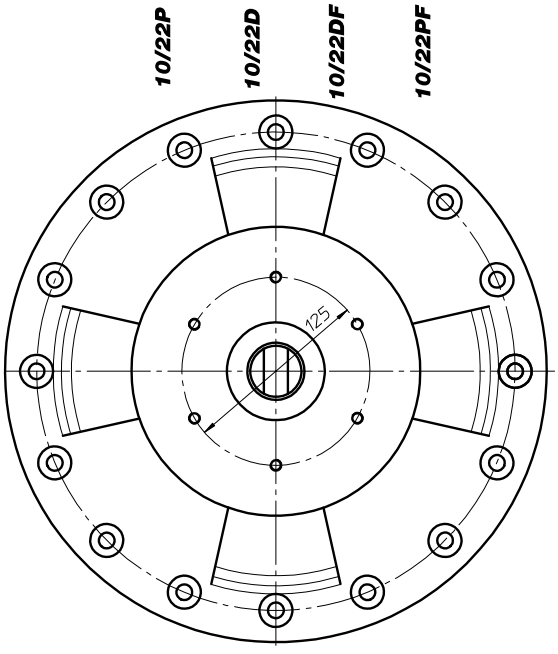


T10

Codice testa *Head code*	Codice mandrino *Spindle code*

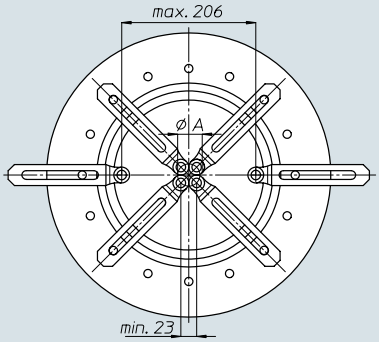






N° prese di moto *Nr. spindle drives*	08-12
Rapporto *Ratio*	1-1
Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 8 10
Maschiatura *Tapping*	M6
Attacco utensile *Type of spindle* D P	 DIN 55058 Ø12 ER16
Peso gruppo testa *Head weight*	Kg 12
Peso gruppo mandrino *Spindle-set weight*	Kg 1,5

area di lavoro
working area



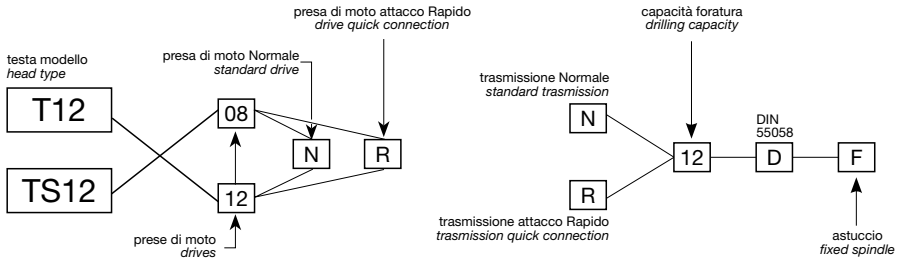
ø A	n° mandrini *n° spindles*
27	3
33	4
39,5	5
46,5	6
53,5	7
60,5	8
67,5	9
75	10
82	11
89,5	12

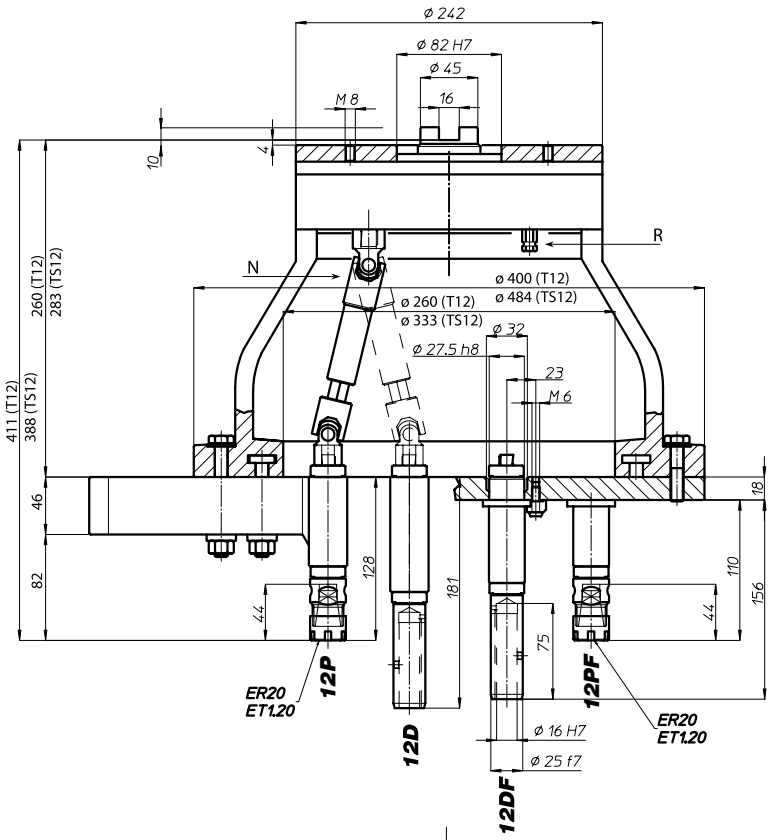
T12-TS12

N° prese di moto *Nr. spindle drives*	08-12
Rapporto *Ratio*	1-1
Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 10 12
Maschiatura *Tapping*	M8
Attacco utensile *Type of spindle* D P	 DIN 55058 Ø16 ER20
Peso gruppo testa *Head weight*	T12: Kg 20 TS12: Kg 22,5
Peso gruppo mandrino *Spindle-set weight*	Kg 2

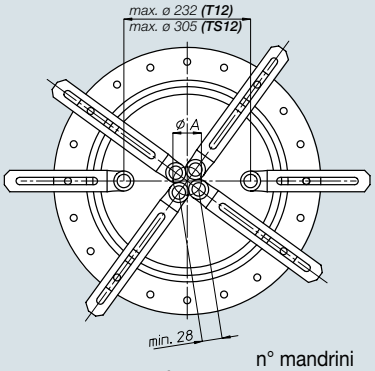
Codice testa
Head code

Codice mandrino
Spindle code

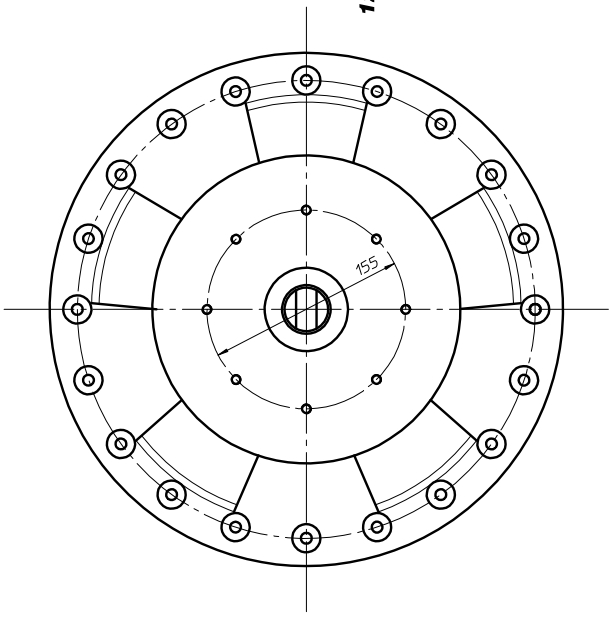




area di lavoro
working area



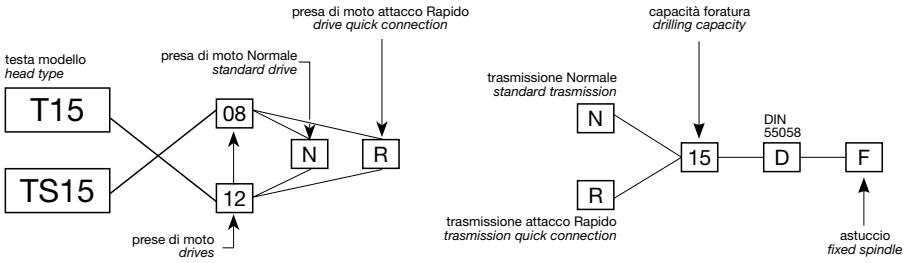
ø A	n° mandrini *n° spindles*
33	3
40	4
48	5
56,5	6
65	7
74	8
82,5	9
91	10
100	11
108,5	12

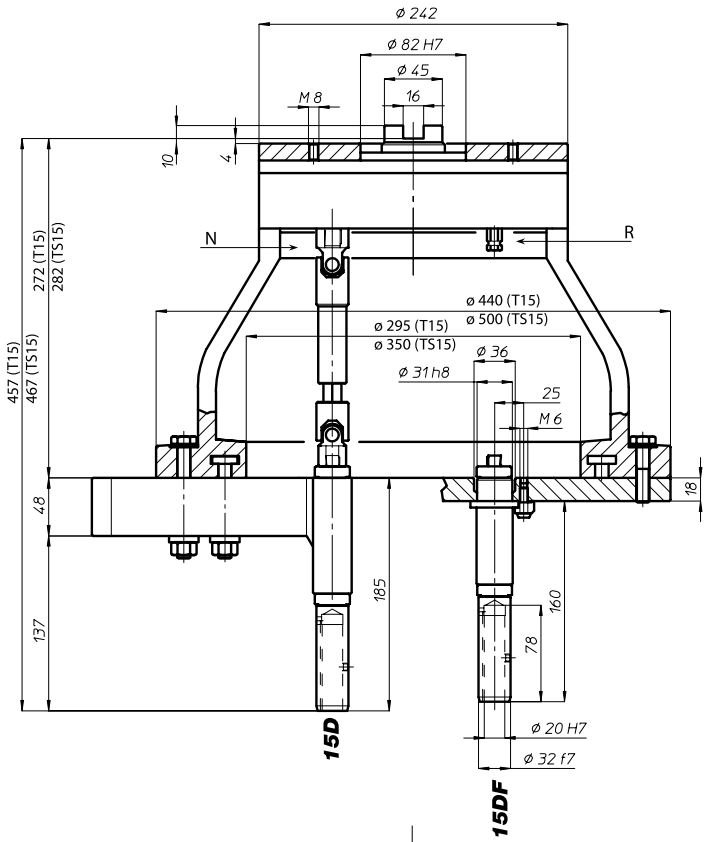


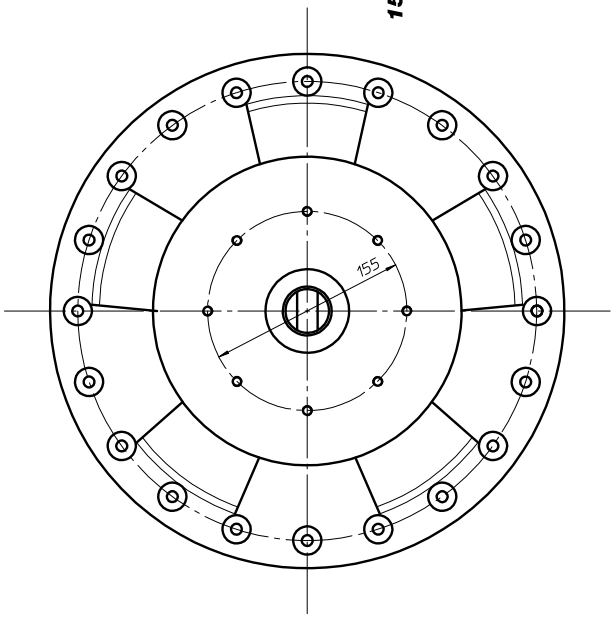
T15-TS15

Codice testa
Head code

Codice mandrino
Spindle code

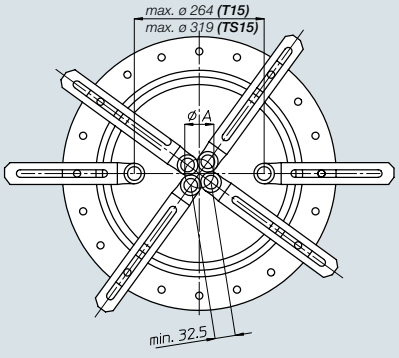






N° prese di moto *Nr. spindle drives*	08-12
Rapporto *Ratio*	1-1
Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 13 15
Maschiatura *Tapping*	M12
Attacco utensile *Type of spindle* D	 DIN 55058 Ø20
Peso gruppo testa *Head weight*	T15: Kg 21,5 TS15: Kg 24,5
Peso gruppo mandrino *Spindle-set weight*	Kg 2,6

area di lavoro
working area

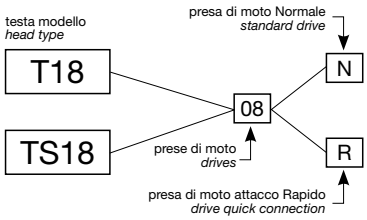


ø A	n° mandrini *n° spindles*
38	3
46,5	4
56	5
65,5	6
75,5	7
85,5	8
95,5	9
105,5	10
116	11
126	12

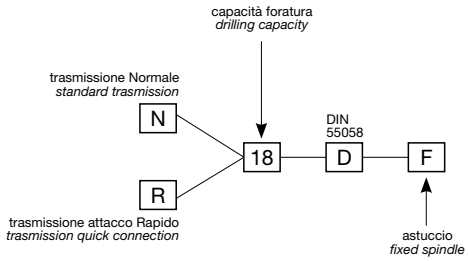
T18-TS18

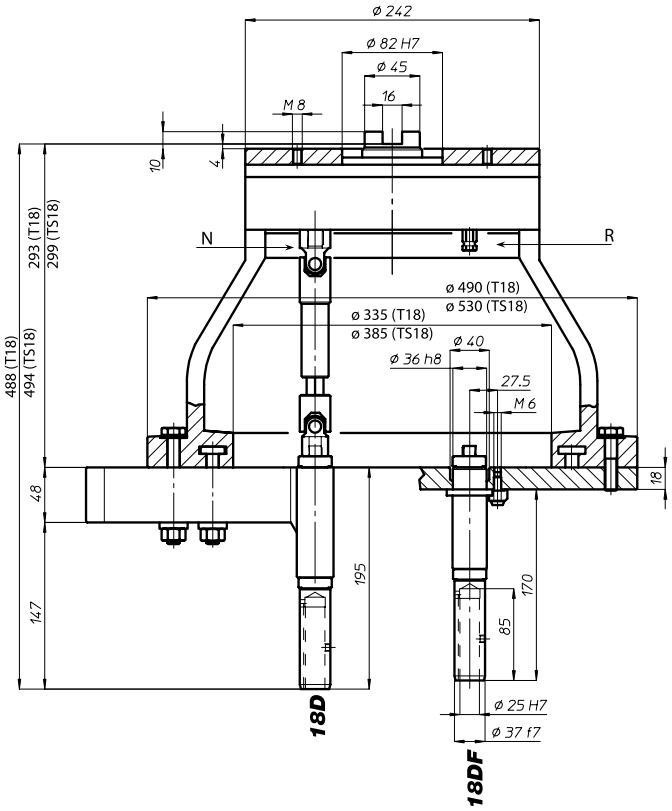
N° prese di moto *Nr. spindle drives*	08
Rapporto *Ratio*	1-1
Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 16 18
Maschiatura *Tapping*	M14
Attacco utensile *Type of spindle* D	 DIN 55058 Ø25
Peso gruppo testa *Head weight*	T18: Kg 25 TS18: Kg 26,5
Peso gruppo mandrino *Spindle-set weight*	Kg 3,3

Codice testa
Head code

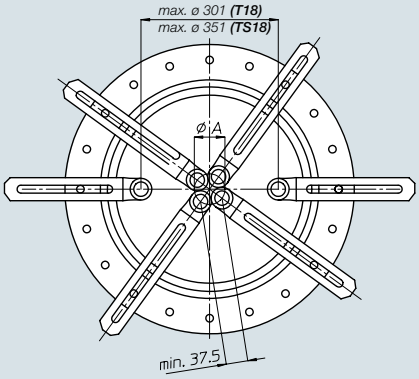


Codice mandrino
Spindle code

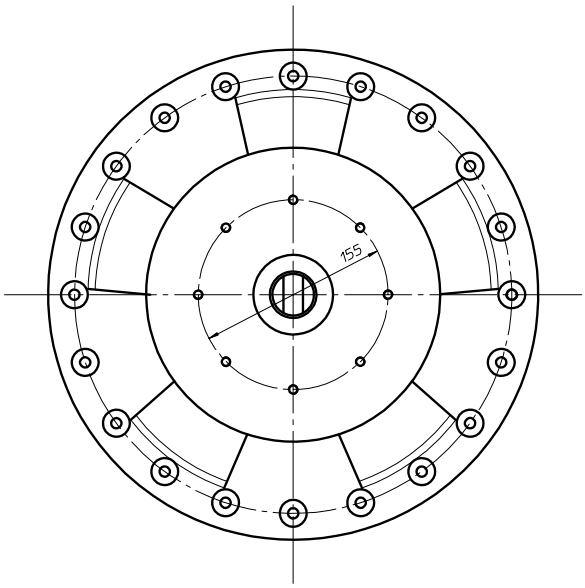




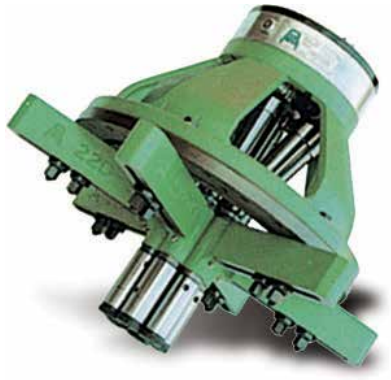
area di lavoro
working area



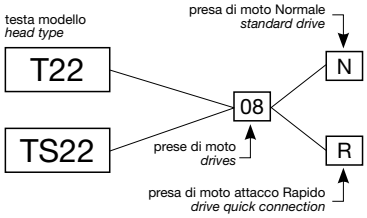
ø A	n° mandrini *n° spindles*
44	3
53,5	4
64,5	5
75,5	6
87	7
98,5	8

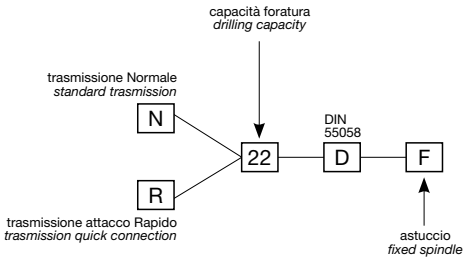


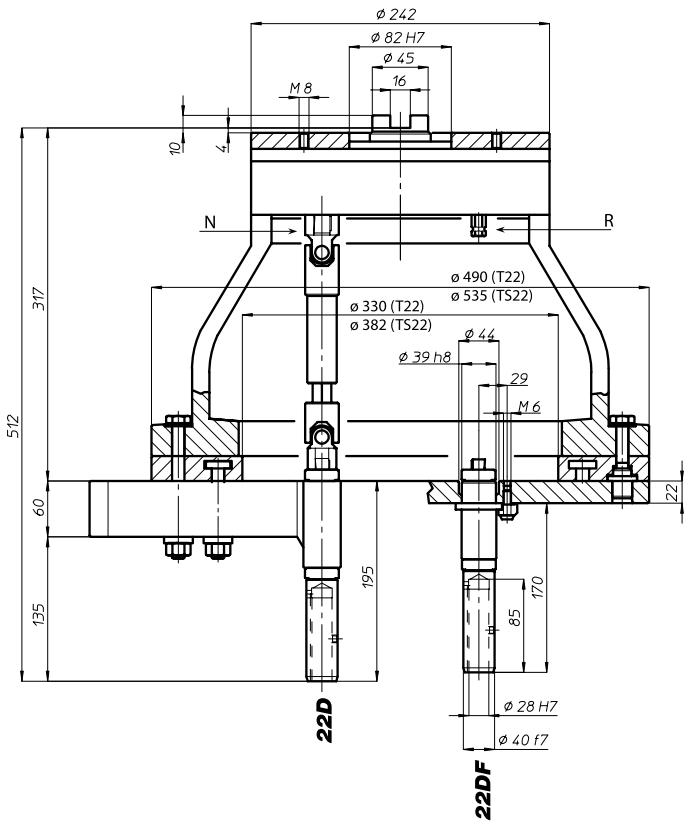
T22-TS22

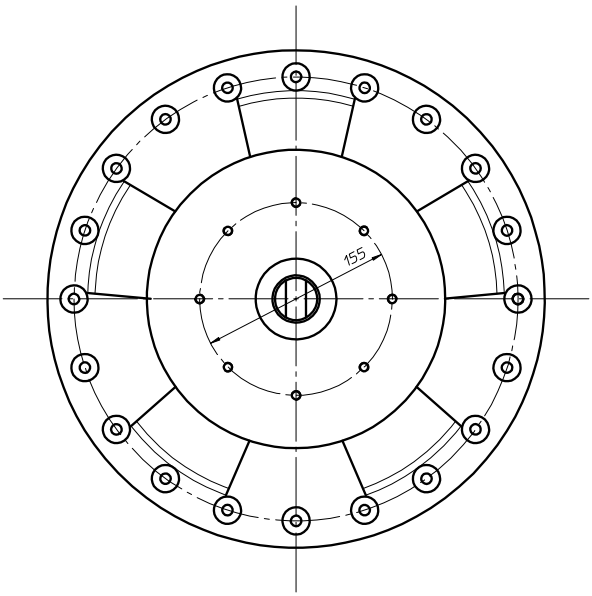


Codice testa *Head code*	Codice mandrino *Spindle code*



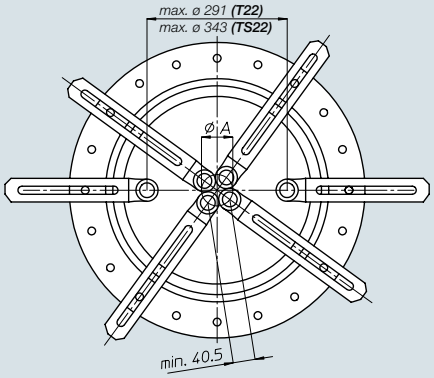






N° prese di moto *Nr. spindle drives*	08
Rapporto *Ratio*	1-1
Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 20 22
Maschiatura *Tapping*	M16
Attacco utensile *Type of spindle* D	 DIN 55058 Ø28
Peso gruppo testa *Head weight*	T22: Kg 38,5 TS22: Kg 41
Peso gruppo mandrino *Spindle-set weight*	Kg 5,5

area di lavoro
working area

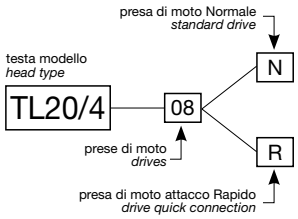


ø A	n° mandrini *n° spindles*
47,5	3
58	4
69,5	5
81,5	6
94	7
106,5	8

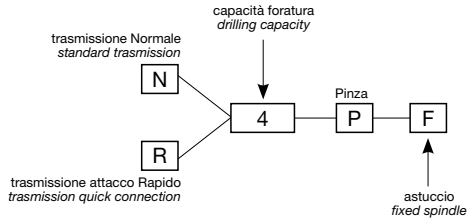
TL20/4

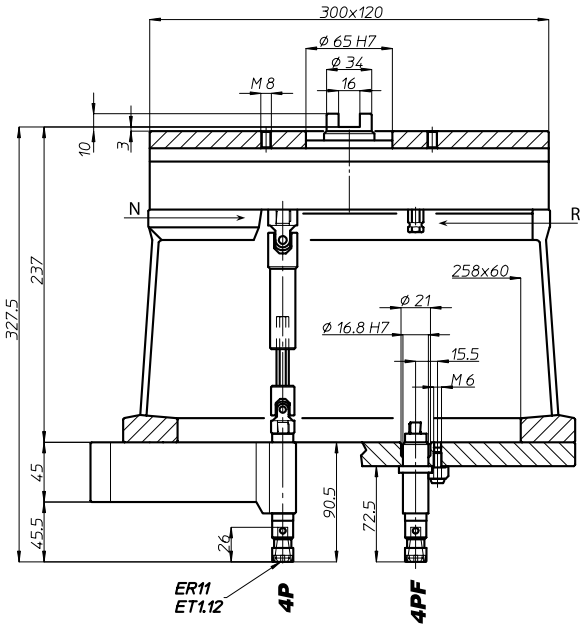
N° prese di moto *Nr. spindle drives*	08
Rapporto *Ratio*	1-1
Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 4 5
Maschiatura *Tapping*	M4
Attacco utensile *Type of spindle* P	 ER11
Peso gruppo testa *Head weight*	Kg 13,5
Peso gruppo mandrino *Spindle-set weight*	Kg 1

Codice testa
Head code

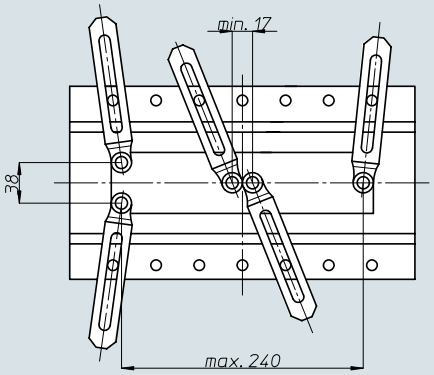


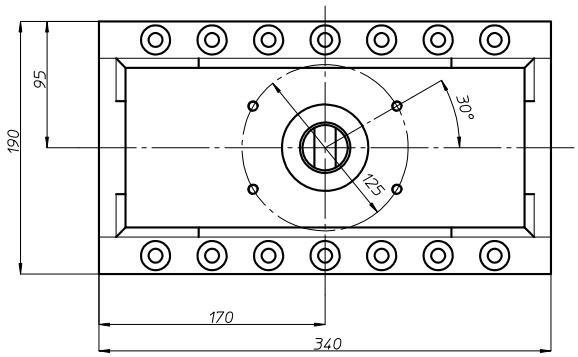
Codice mandrino
Spindle code





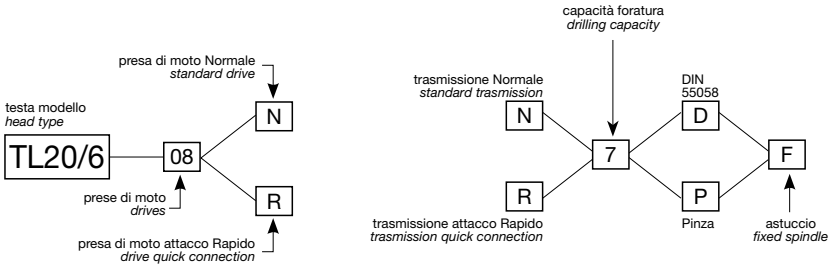
area di lavoro
working area



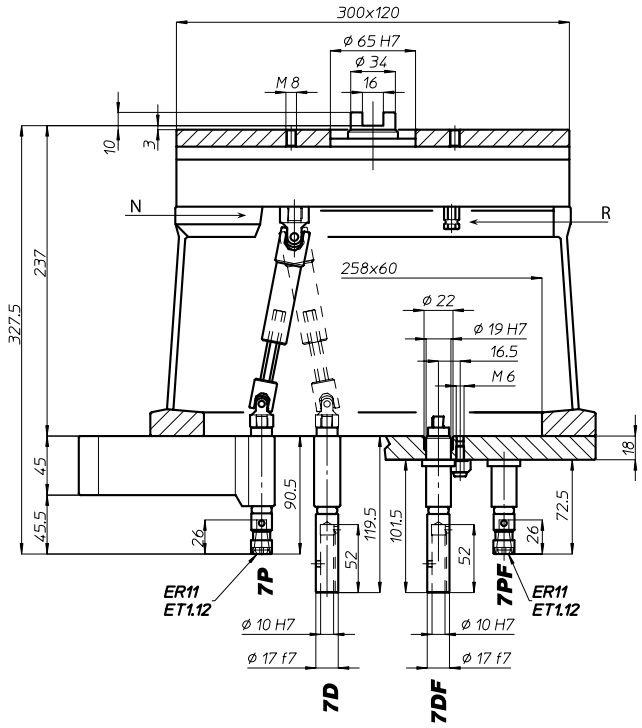


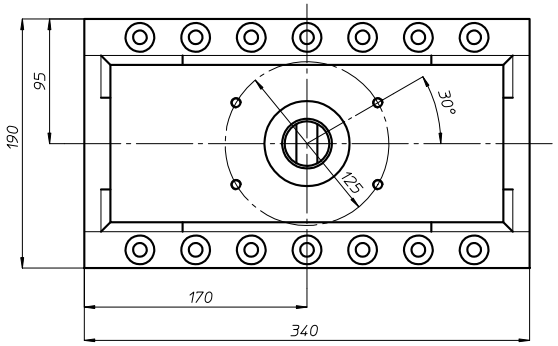
TL20/6

Codice testa *Head code*	Codice mandrino *Spindle code*

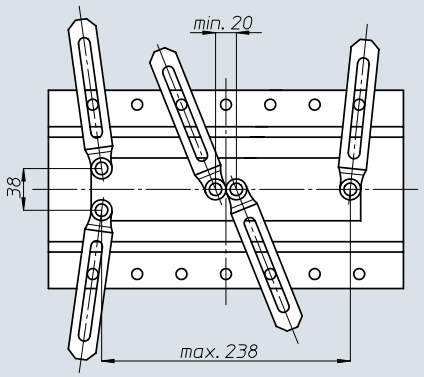


N° prese di moto *Nr. spindle drives*	08
Rapporto *Ratio*	1-1
Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 6 7
Maschiatura *Tapping*	M5
Attacco utensile *Type of spindle* D P	 DIN 55058 Ø10 ER11
Peso gruppo testa *Head weight*	Kg 13,5
Peso gruppo mandrino *Spindle-set weight*	Kg 1





area di lavoro
working area

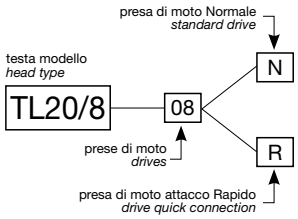


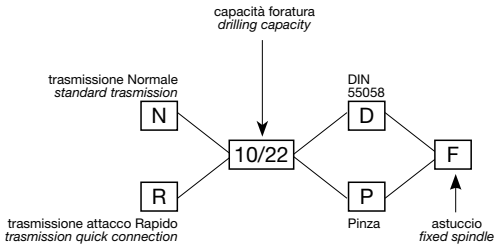
TL20/8

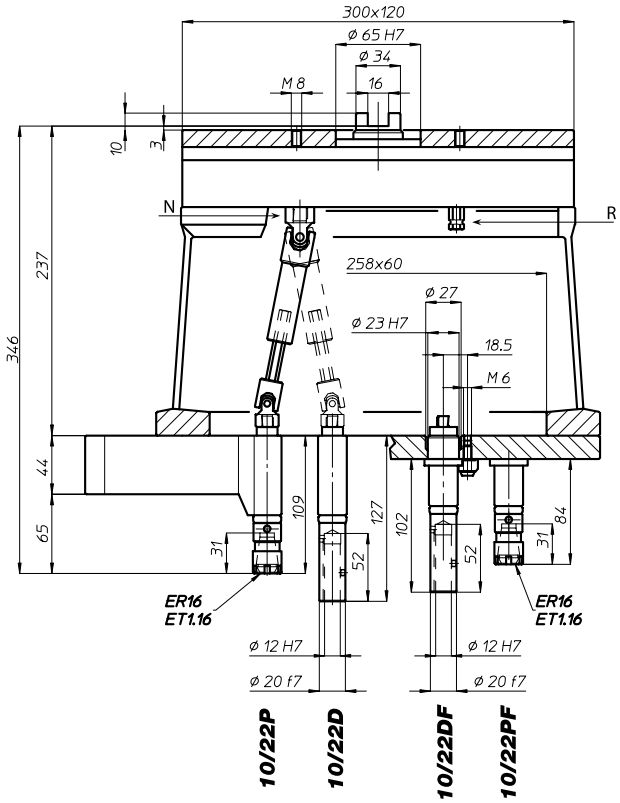
N° prese di moto *Nr. spindle drives*	08
Rapporto *Ratio*	1-1
Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 8 10
Maschiatura *Tapping*	M6
Attacco utensile *Type of spindle* D P	 DIN 55058 Ø12 ER16
Peso gruppo testa *Head weight*	Kg 13,5
Peso gruppo mandrino *Spindle-set weight*	Kg 1,5

Codice testa
Head code

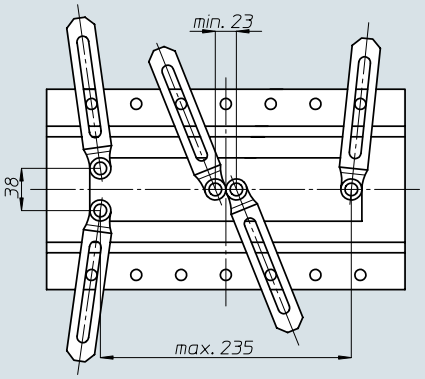
Codice mandrino
Spindle code

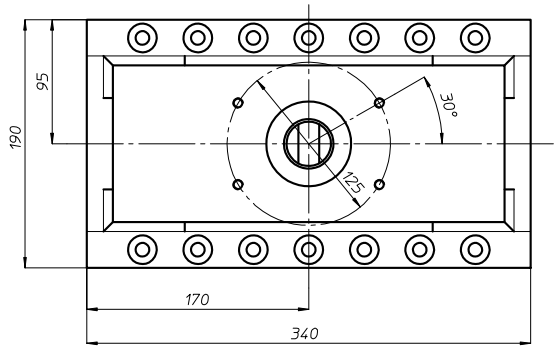






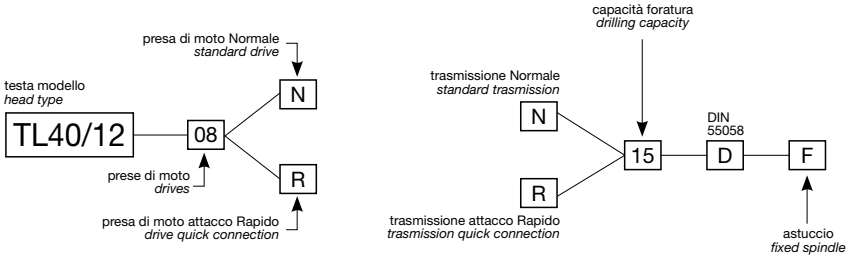
area di lavoro
working area



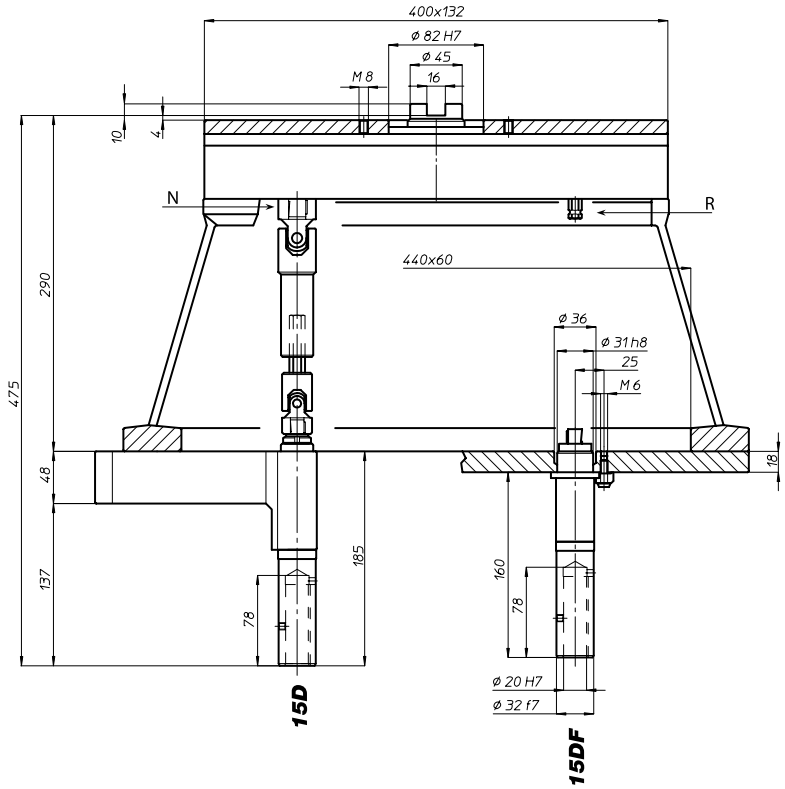


TL40/12

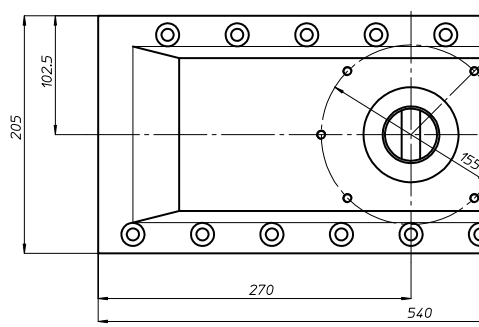
Codice testa *Head code*	Codice mandrino *Spindle code*

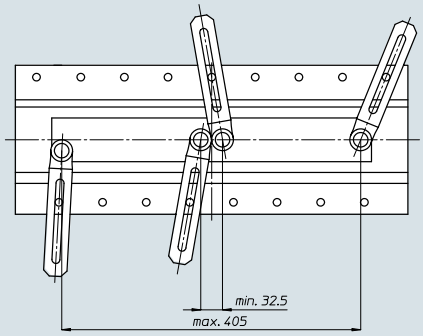


N° prese di moto *Nr. spindle drives*	08
Rapporto *Ratio*	1-1
Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 13 15
Maschiatura *Tapping*	M12
Attacco utensile *Type of spindle* D	 DIN 55058 Ø20
Peso gruppo testa *Head weight*	Kg 25
Peso gruppo mandrino *Spindle-set weight*	Kg 2,5



area di lavoro
working area

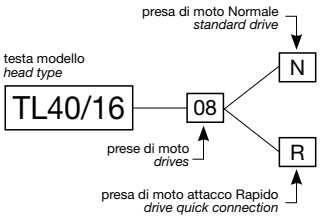




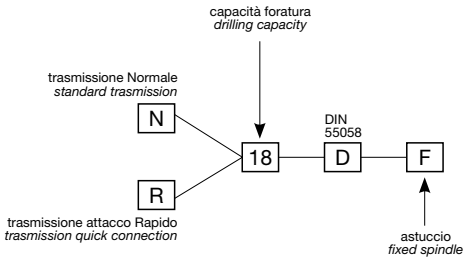
TL40/16

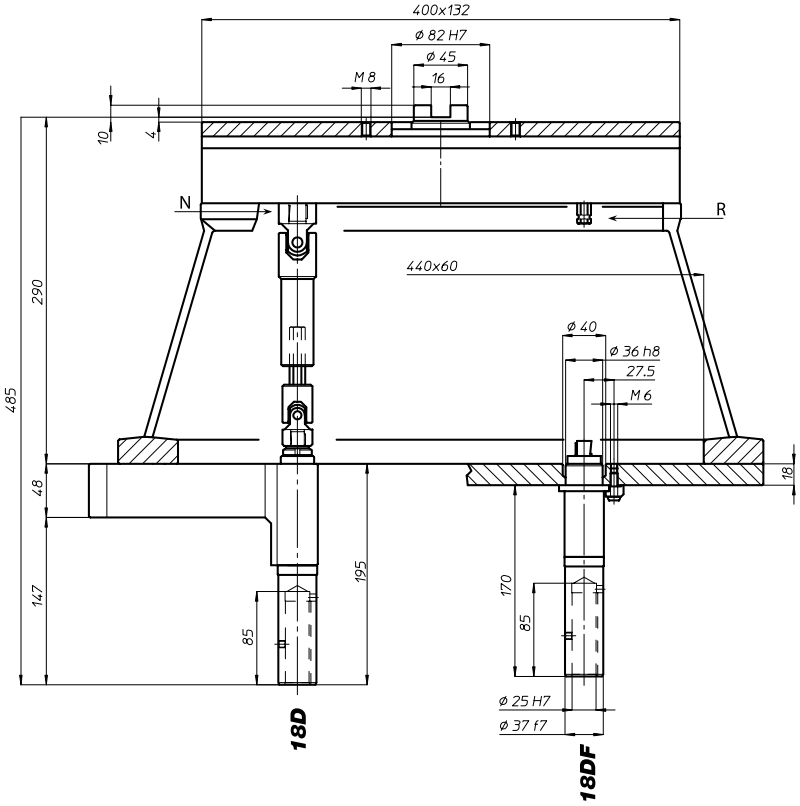
N° prese di moto *Nr. spindle drives*	08
Rapporto *Ratio*	1-1
Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 16 18
Maschiatura *Tapping*	M14
Attacco utensile *Type of spindle* D	 DIN 55058 Ø25
Peso gruppo testa *Head weight*	Kg 26
Peso gruppo mandrino *Spindle-set weight*	Kg 2,5

Codice testa
Head code

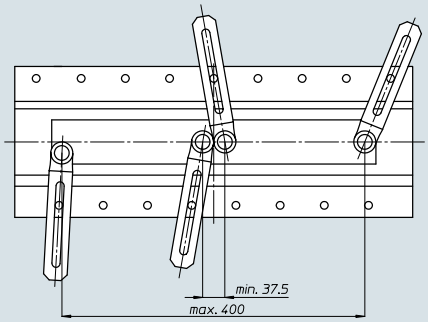


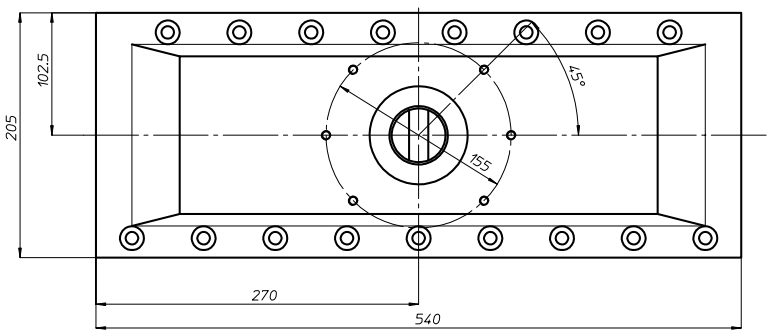
Codice mandrino
Spindle code





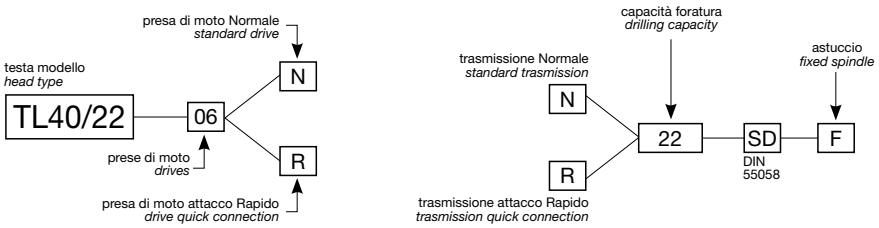
area di lavoro
working area

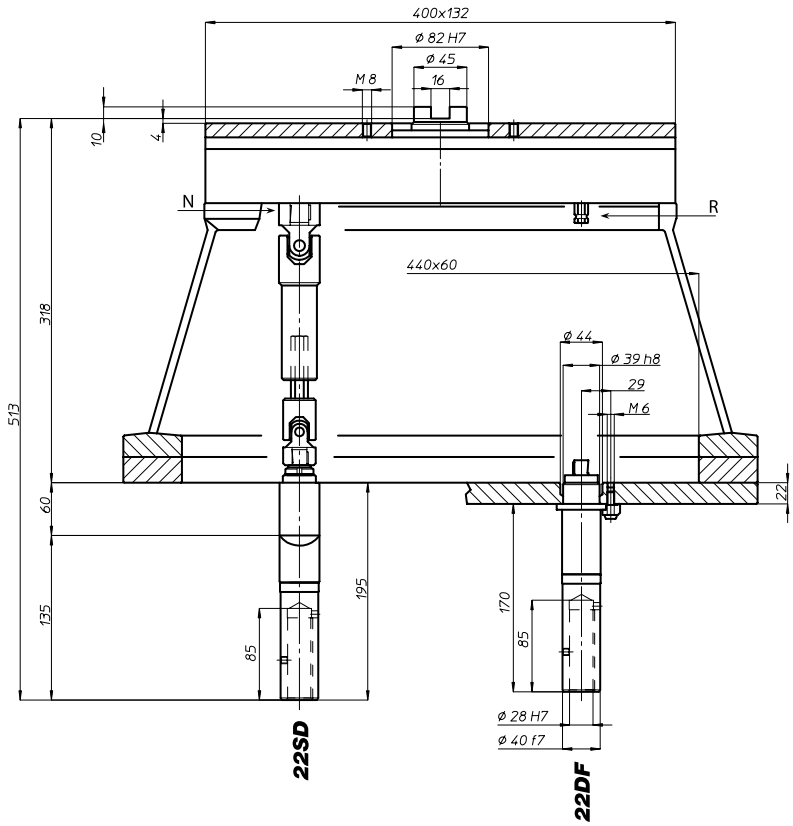


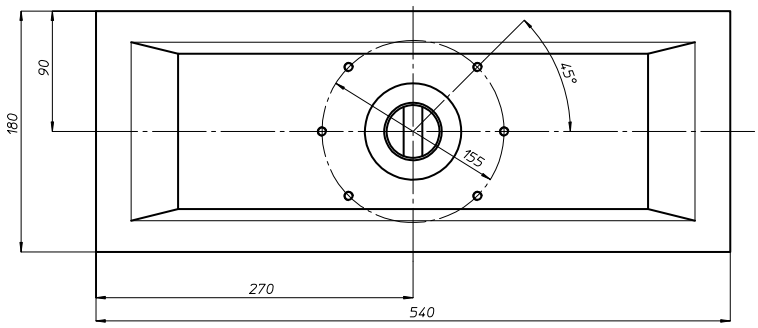


TL40/22

Codice testa *Head code*	Codice mandrino *Spindle code*

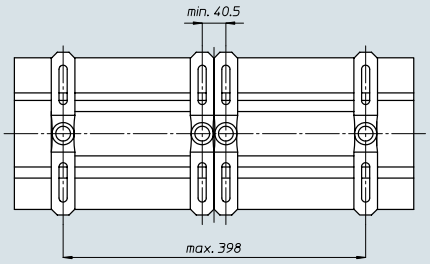






N° prese di moto *Nr. spindle drives*	06
Rapporto *Ratio*	1-1
Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 20 22
Maschiatura *Tapping*	M16
Attacco utensile *Type of spindle* D	 DIN 55058 Ø28
Peso gruppo testa *Head weight*	Kg 37
Peso gruppo mandrino *Spindle-set weight*	Kg 5

area di lavoro
working area

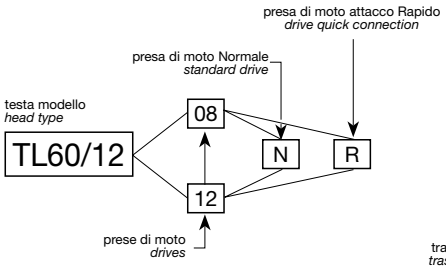


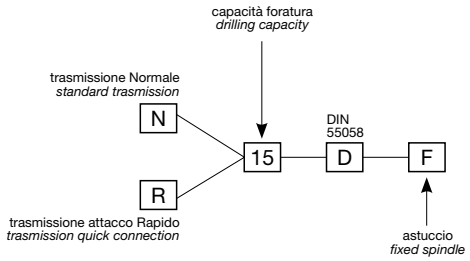
TL60/12

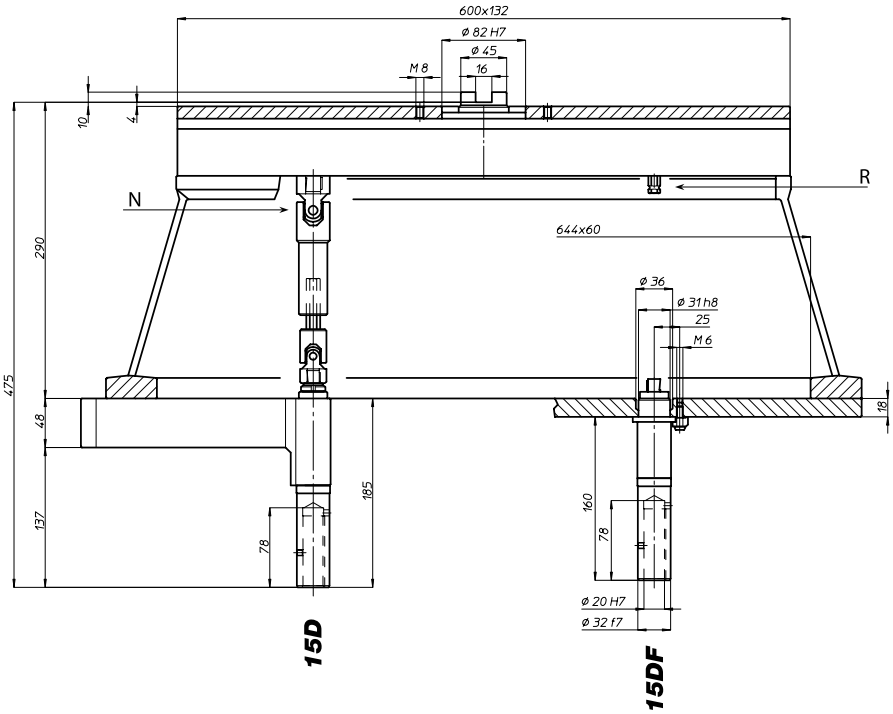
N° prese di moto *Nr. spindle drives*	08-12
Rapporto *Ratio*	1-1
Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 13 15
Maschiatura *Tapping*	M12
Attacco utensile *Type of spindle* D	 DIN 55058 Ø20
Peso gruppo testa *Head weight*	Kg 34,5
Peso gruppo mandrino *Spindle-set weight*	Kg 2,5

Codice testa
Head code

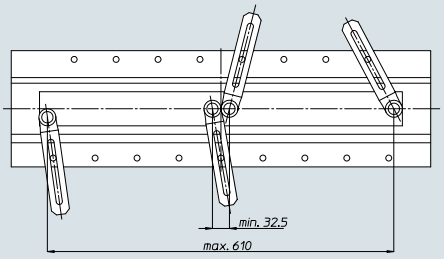
Codice mandrino
Spindle code

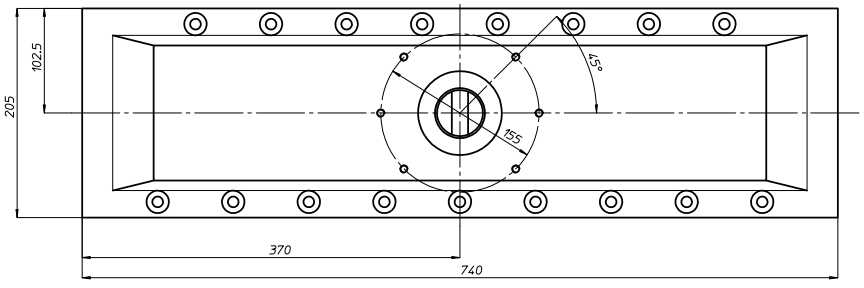






area di lavoro
working area

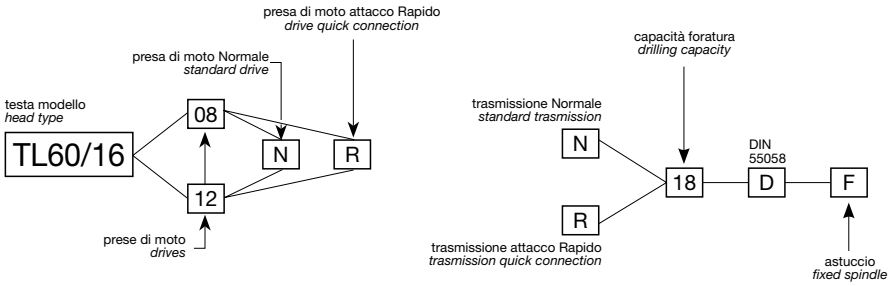




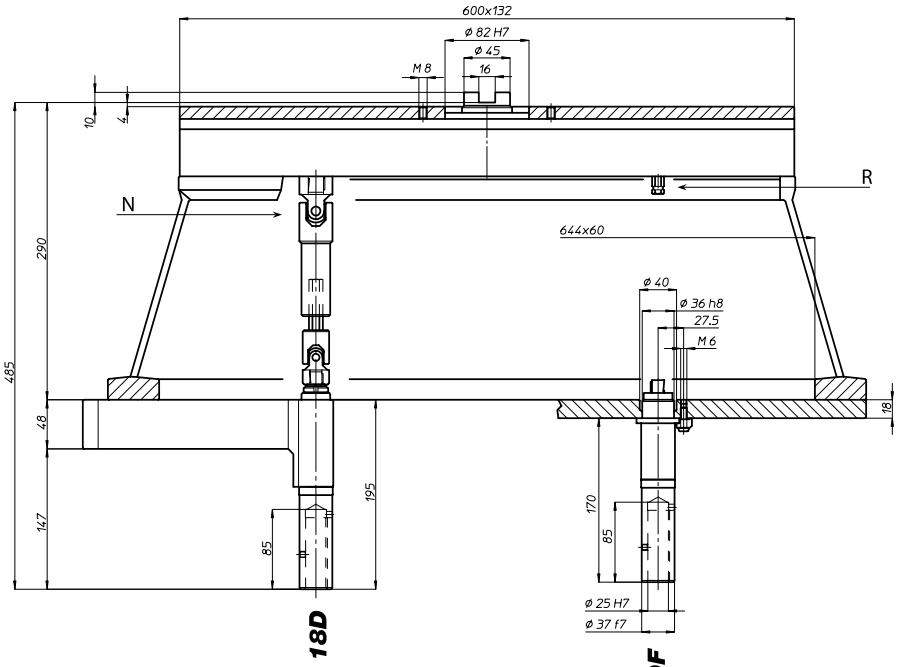
TL60/16

Codice testa
Head code

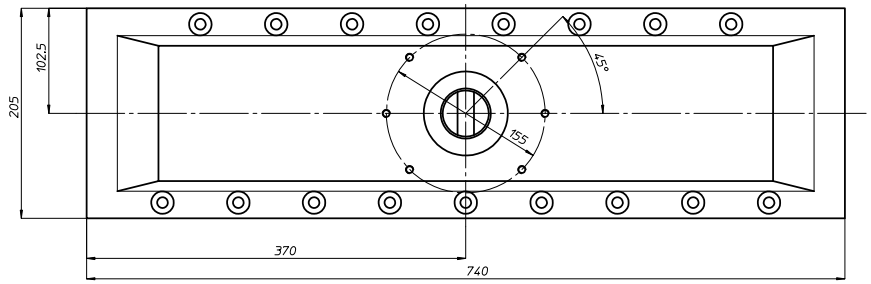
Codice mandrino
Spindle code

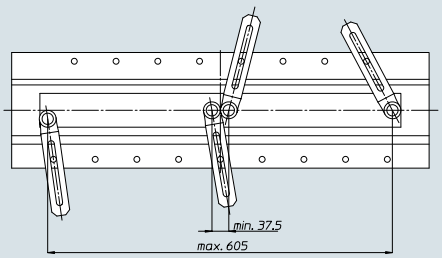


N° prese di moto *Nr. spindle drives*	08-12
Rapporto *Ratio*	1-1
Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 16 18
Maschiatura *Tapping*	M14
Attacco utensile *Type of spindle* D	 DIN 55058 Ø25
Peso gruppo testa *Head weight*	Kg 36
Peso gruppo mandrino *Spindle-set weight*	Kg 2,5



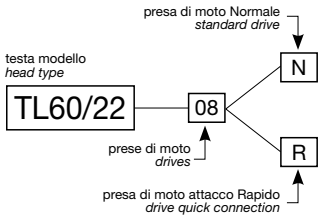
area di lavoro
working area

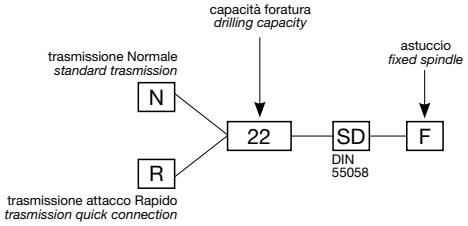




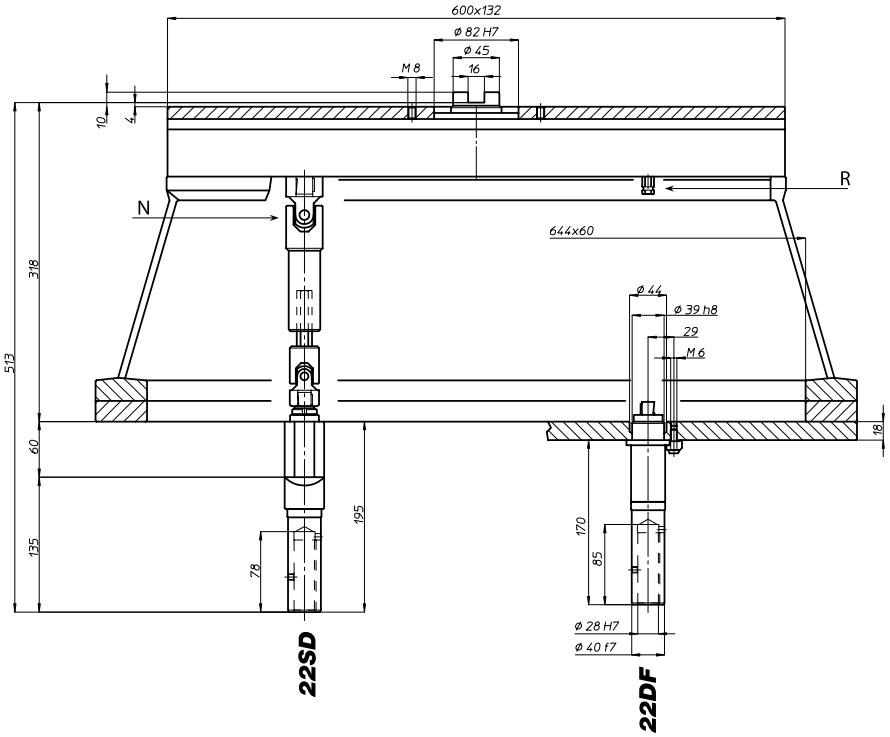
TL60/22

Codice testa *Head code*	
Codice mandrino *Spindle code*	

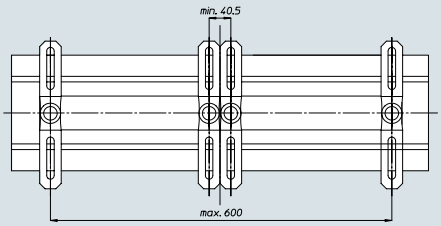


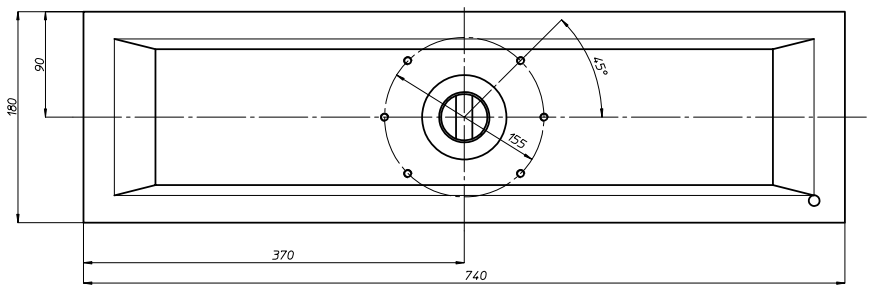


N° prese di moto *Nr. spindle drives*	08
Rapporto *Ratio*	1-1
Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 20 22
Maschiatura *Tapping*	M16
Attacco utensile *Type of spindle* D	 DIN 55058 Ø28
Peso gruppo testa *Head weight*	Kg 47,5
Peso gruppo mandrino *Spindle-set weight*	Kg 5



area di lavoro
working area

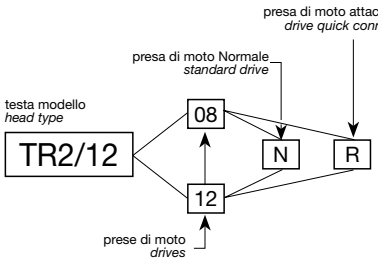




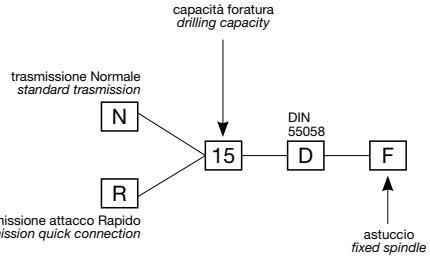
TR2/12

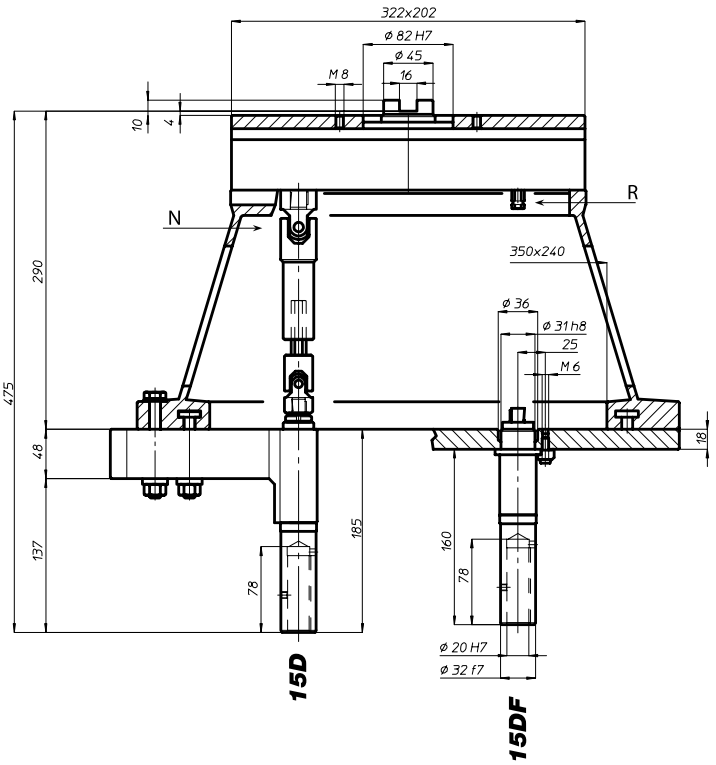
N° prese di moto *Nr. spindle drives*	08-12
Rapporto *Ratio*	1-1
Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 13 15
Maschiatura *Tapping*	M12
Attacco utensile *Type of spindle* D	 DIN 55058 Ø20
Peso gruppo testa *Head weight*	Kg 30
Peso gruppo mandrino *Spindle-set weight*	Kg 2,6

Codice testa
Head code

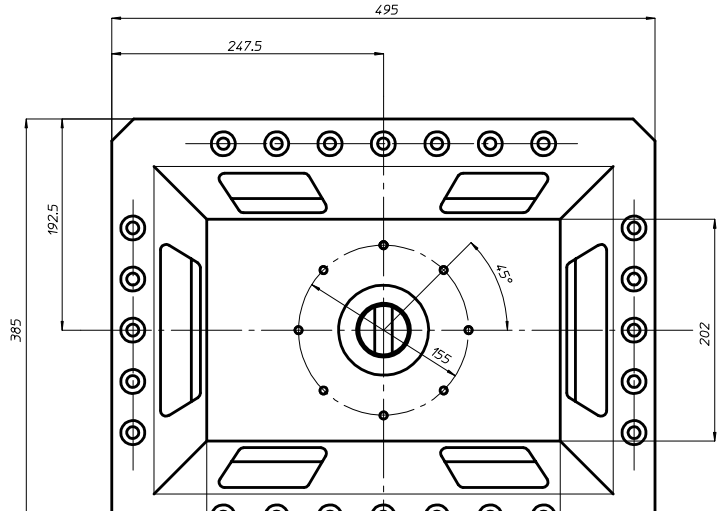


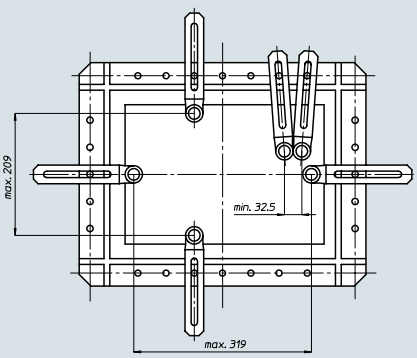
Codice mandrino
Spindle code





area di lavoro
working area

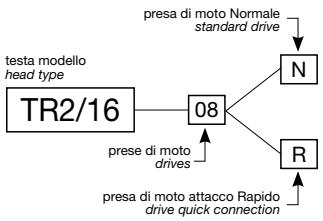




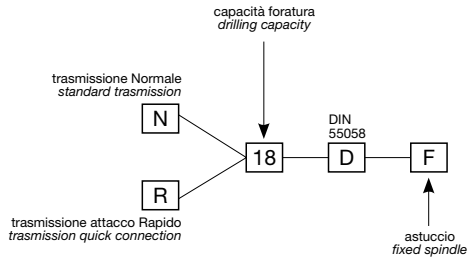
TR2/16

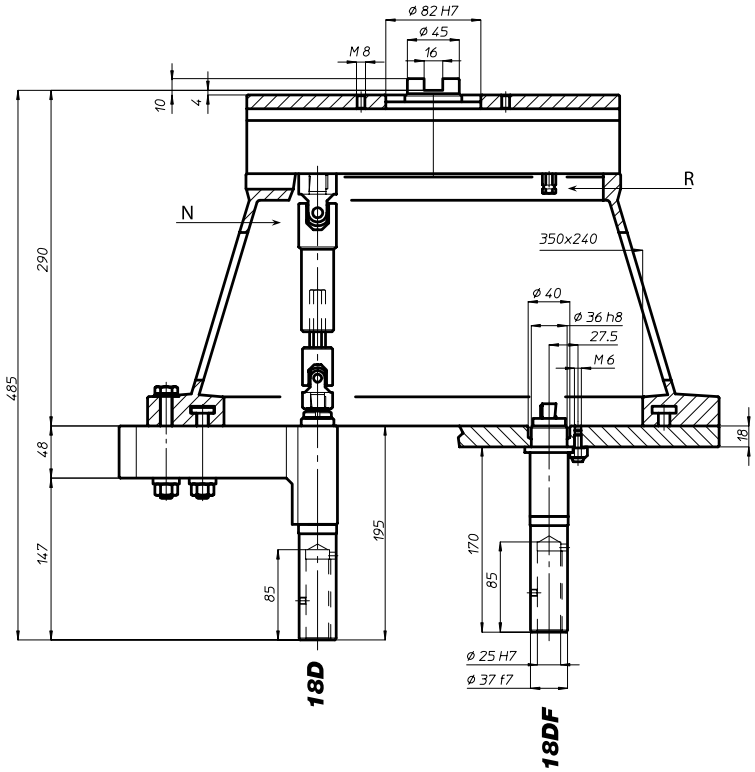
N° prese di moto *Nr. spindle drives*	10
Rapporto *Ratio*	1-1
Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 16 18
Maschiatura *Tapping*	M14
Attacco utensile *Type of spindle* D	 DIN 55058 Ø25
Peso gruppo testa *Head weight*	Kg 31
Peso gruppo mandrino *Spindle-set weight*	Kg 3,3

Codice testa
Head code

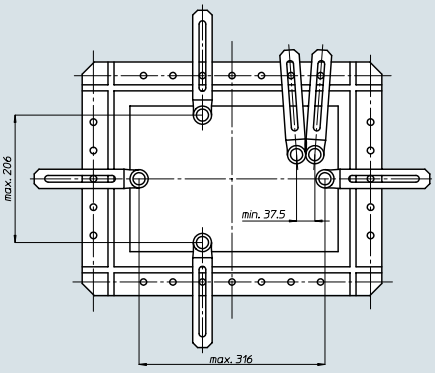


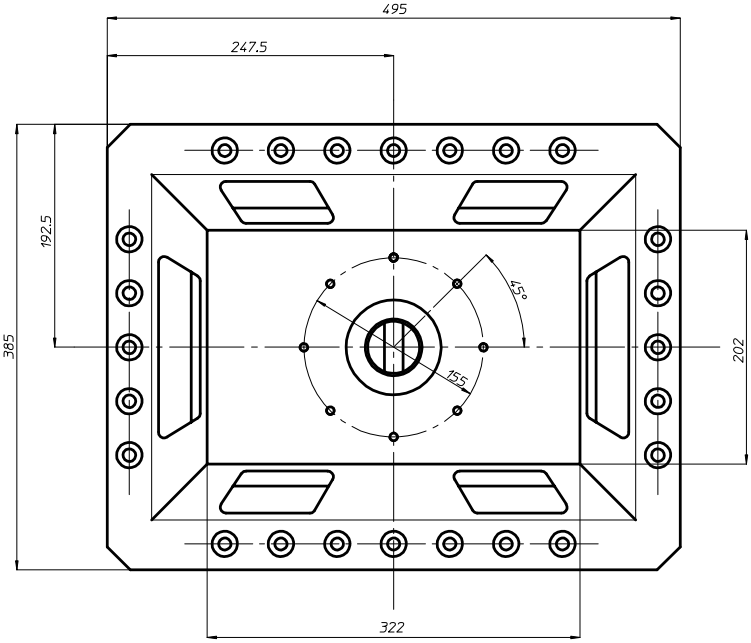
Codice mandrino
Spindle code





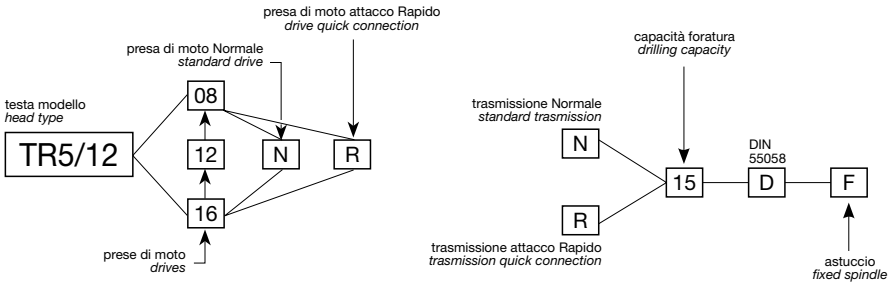
area di lavoro
working area

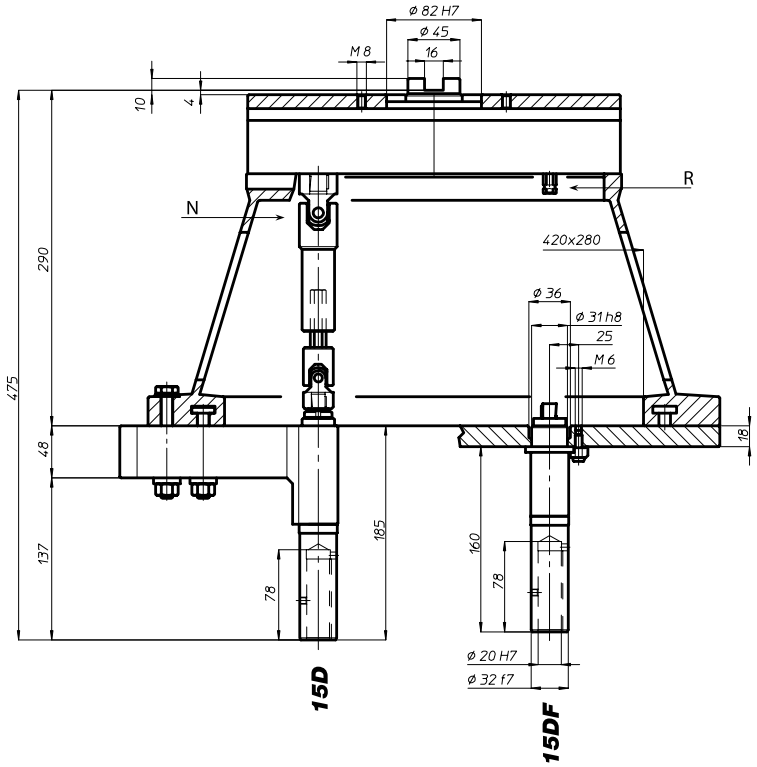


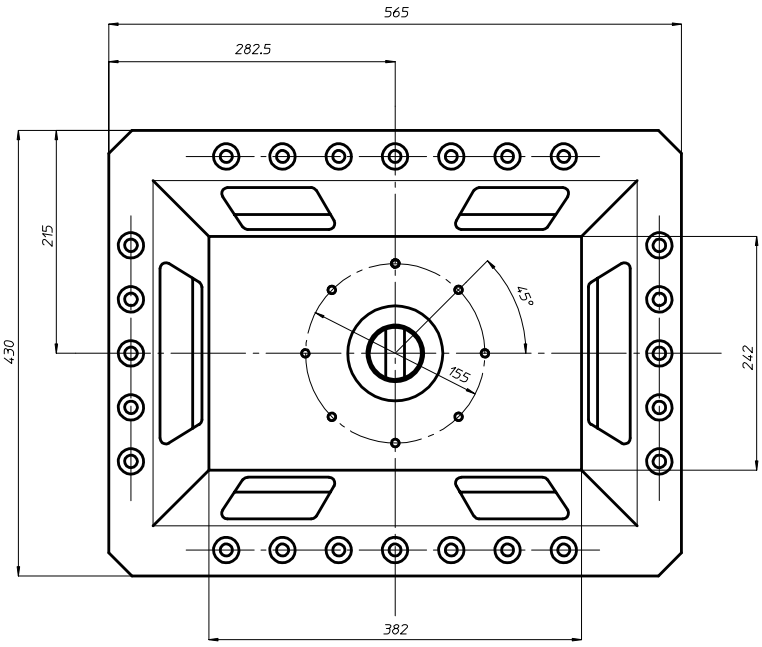


TR5/12

Codice testa *Head code*	Codice mandrino *Spindle code*

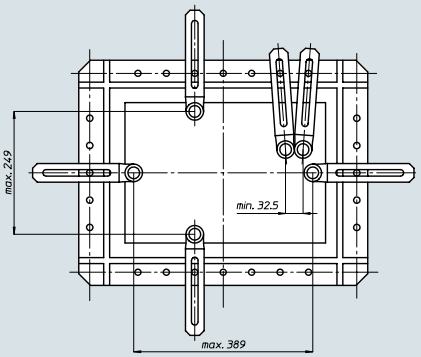






N° prese di moto *Nr. spindle drives*	08-12-16
Rapporto *Ratio*	1-1
Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 13 15
Maschiatura *Tapping*	M12
Attacco utensile *Type of spindle* D	 DIN 55058 Ø20
Peso gruppo testa *Head weight*	Kg 34,5
Peso gruppo mandrino *Spindle-set weight*	Kg 2,6

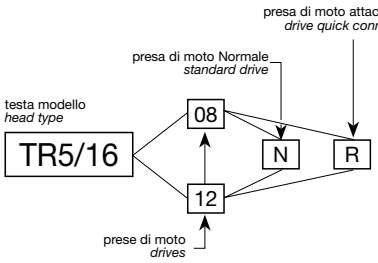
area di lavoro
working area



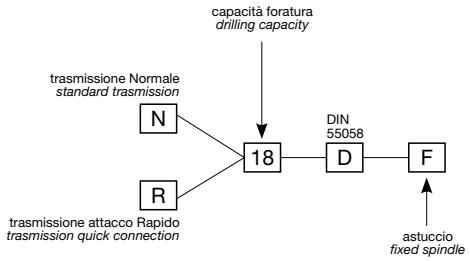
TR5/16

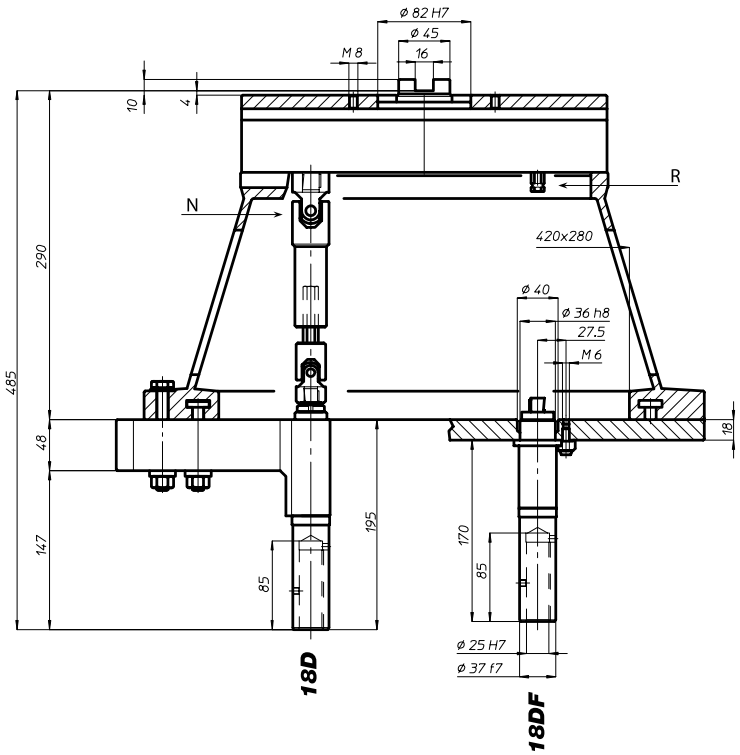
N° prese di moto *Nr. spindle drives*	08-12
Rapporto *Ratio*	1-1
Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 16 18
Maschiatura *Tapping*	M14
Attacco utensile *Type of spindle* D	 DIN 55058 Ø25
Peso gruppo testa *Head weight*	Kg 36
Peso gruppo mandrino *Spindle-set weight*	Kg 3,3

Codice testa
Head code

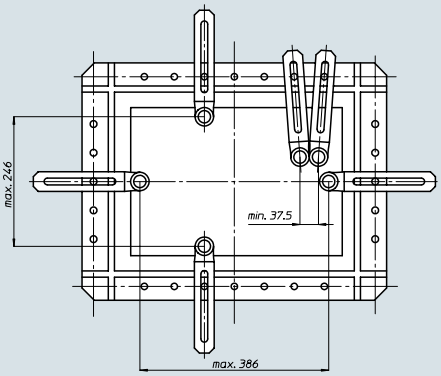


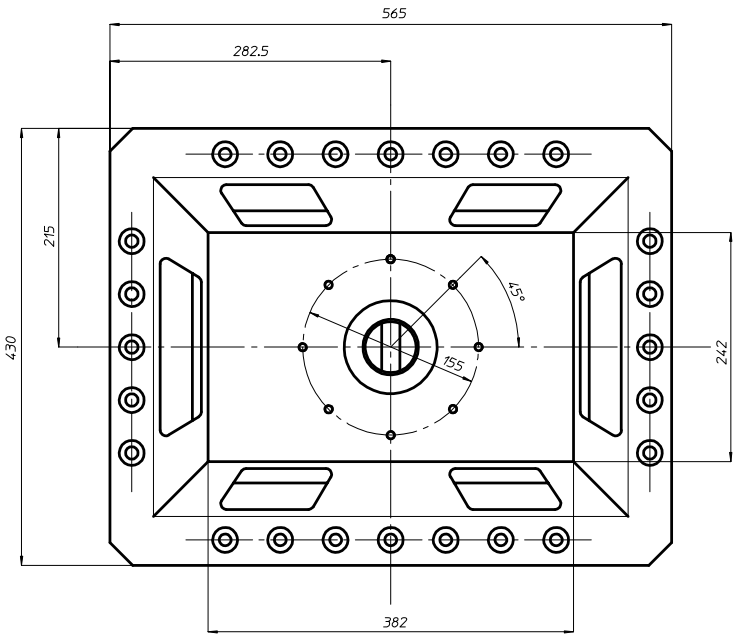
Codice mandrino
Spindle code





area di lavoro
working area

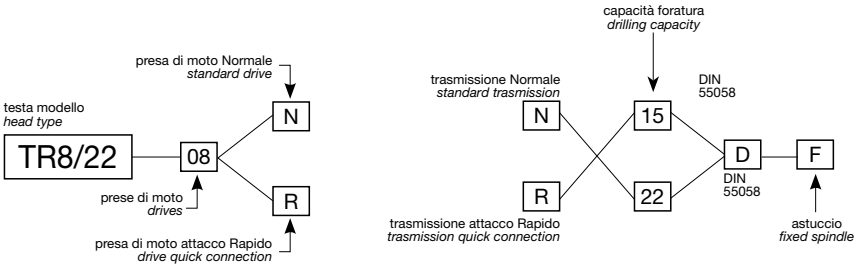


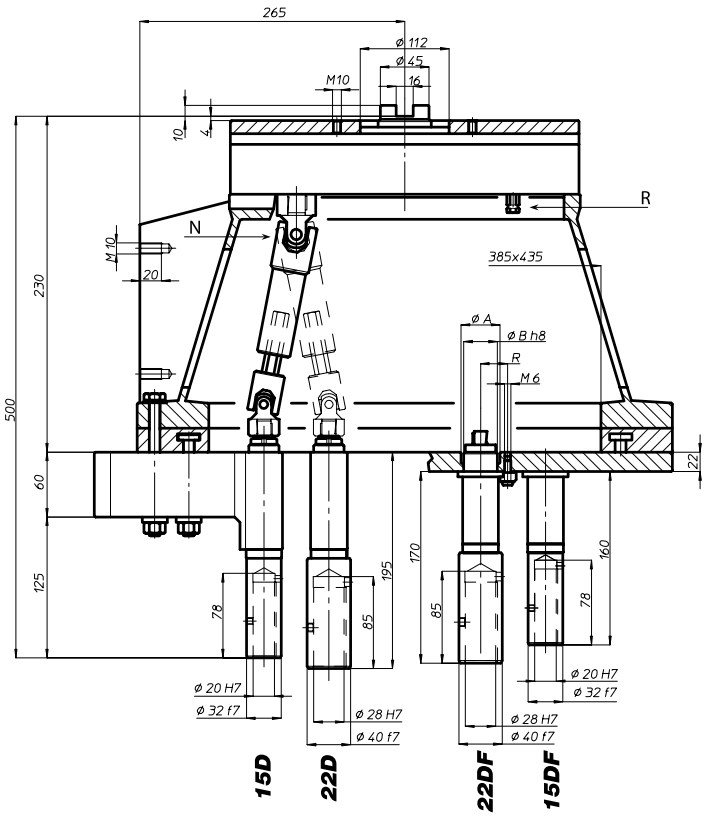


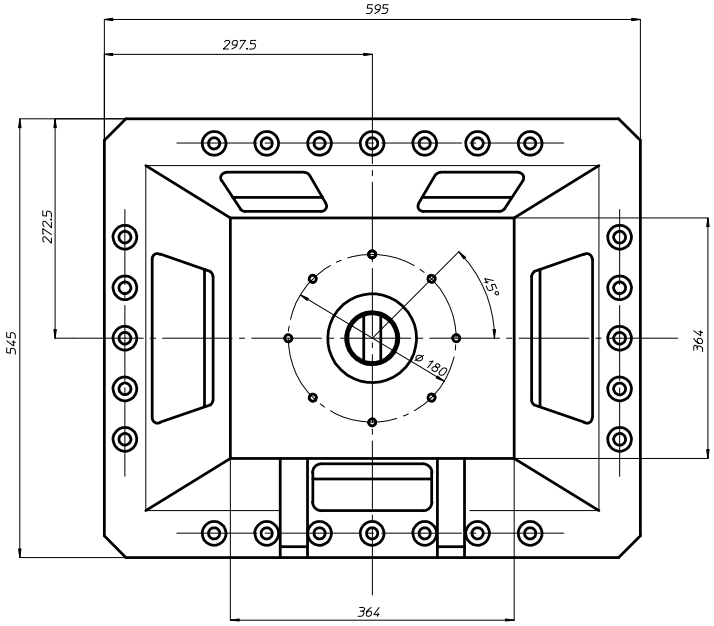
TR8/22

Codice testa
Head code

Codice mandrino
Spindle code

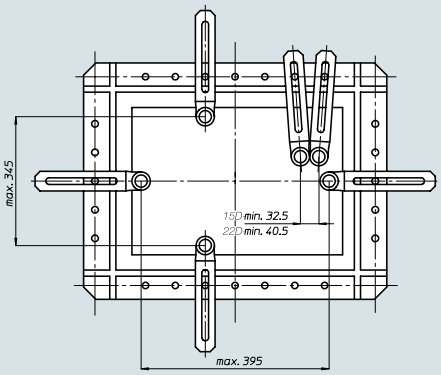






N° prese di moto *Nr. spindle drives*	12
Rapporto *Ratio*	1-1,5
Capacità di foratura *Drilling capacity* acciaio R=500 N/mm² ghisa: GG25	 15D: 13 22D: 20 15D: 15 22D: 22
Maschiatura *Tapping*	15D: M12 22D: M16
Attacco utensile *Type of spindle* D	 DIN 55058 Ø20-Ø28
Peso gruppo testa *Head weight*	Kg 86
Peso gruppo mandrino *Spindle-set weight*	15D: Kg 4 22D: Kg 5,5

area di lavoro
working area



TM400

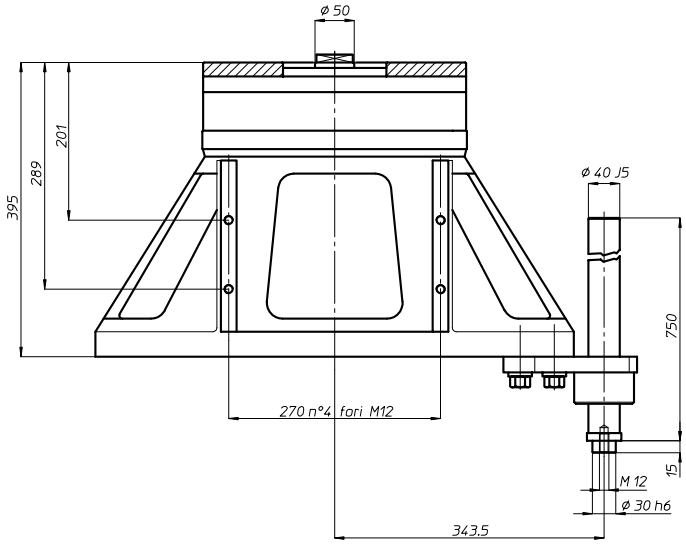
Codice testa
Head code

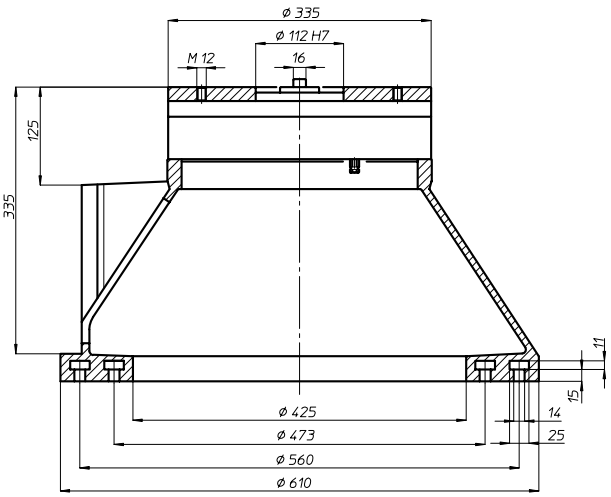
testa modello
head type

TM400 — 12 — R

12: prese di moto *drives*

R: presa di moto attacco Rapido *drive quick connection*

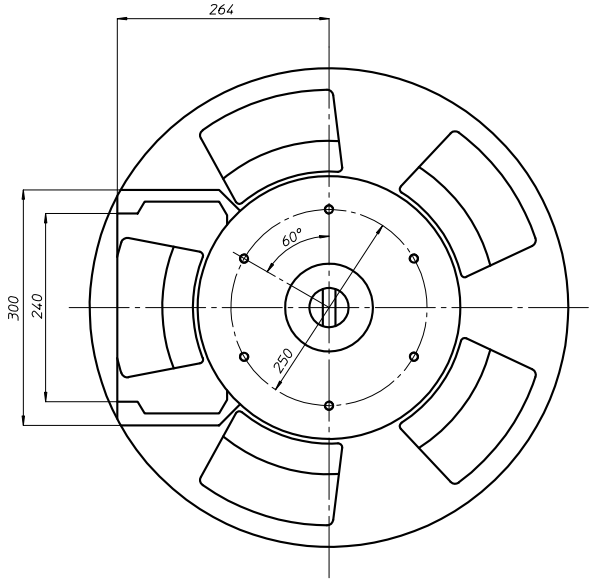




N° prese di moto *Nr. spindle drives*	**12**
Rapporto *Ratio*	**1-1**
Peso *Weight*	**Kg 105**

area di lavoro
working area

Ø 385



TM500

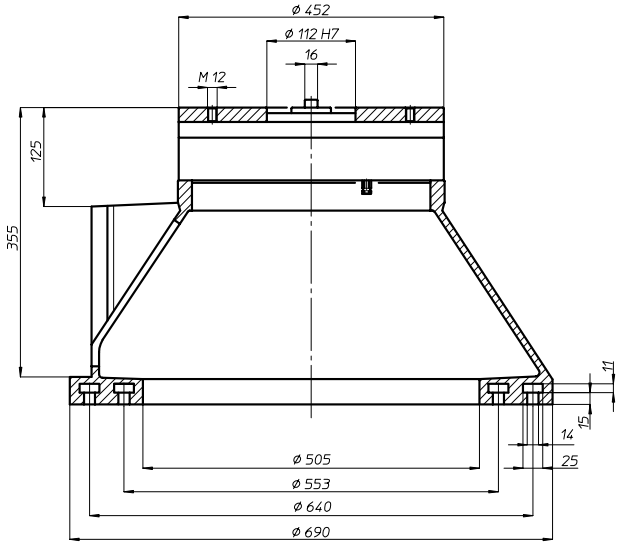
Codice testa
Head code

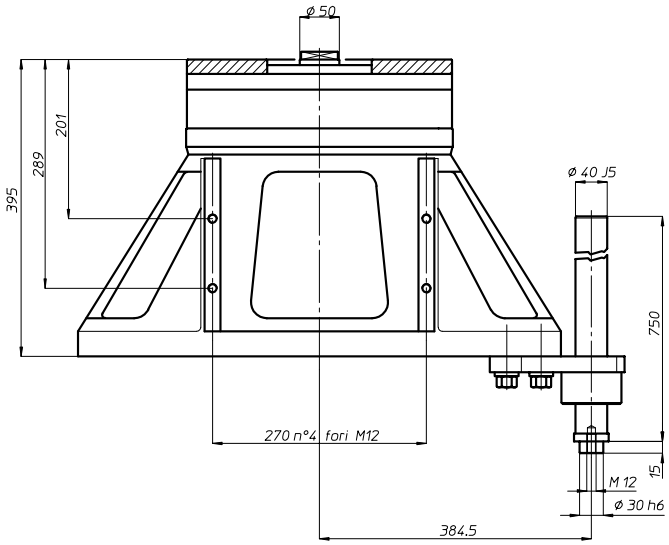
testa modello
head type

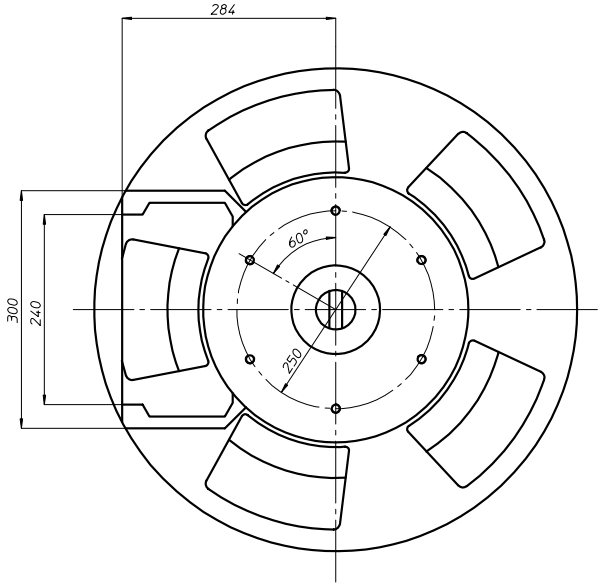
TM500 — 18 — R

18: prese di moto *drives*

R: presa di moto attacco Rapido *drive quick connection*







N° prese di moto *Nr. spindle drives*	**18**
Rapporto *Ratio*	**1-1**
Peso *Weight*	**Kg 145**

area di lavoro
working area

Ø 465

TRM43

Codice testa
Head code

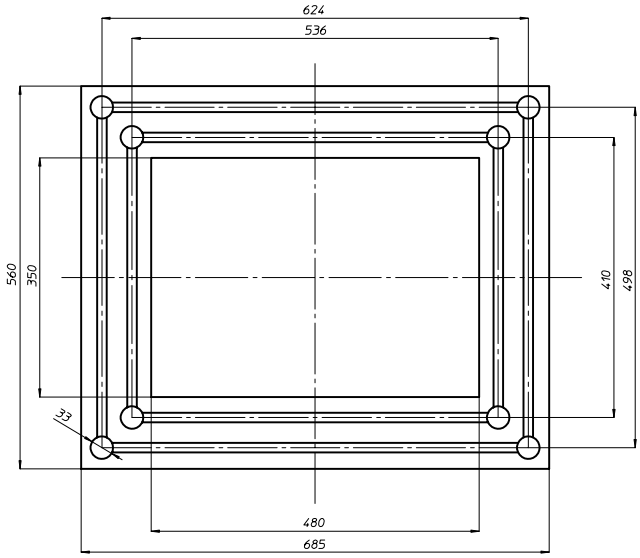
testa modello
head type

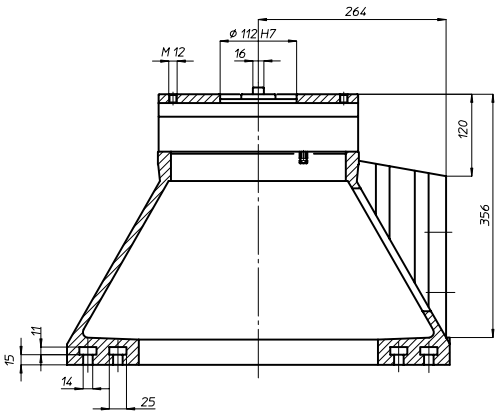
TRM43 — 16 — R

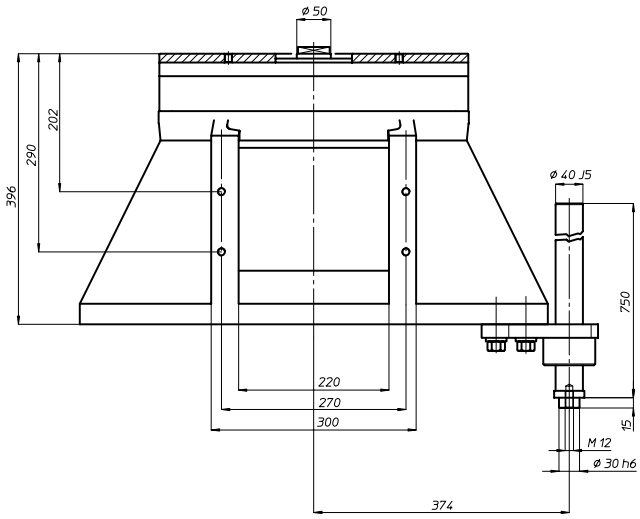
16: prese di moto *drives*

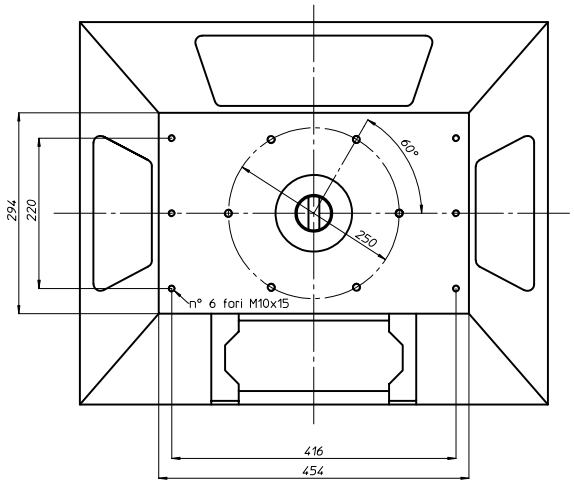
R: presa di moto attacco Rapido *drive quick connection*

N° prese di moto *Nr. spindle drives*	**16**
Rapporto *Ratio*	**1-1**
Peso *Weight*	**Kg 135**









area di lavoro
working area

300 x 440

TRM73

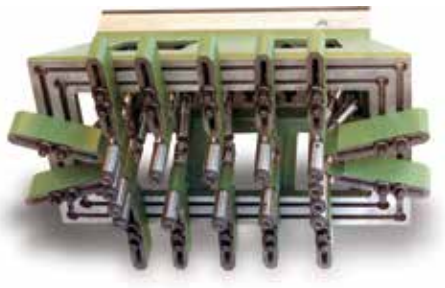
Codice testa
Head code

testa modello
head type

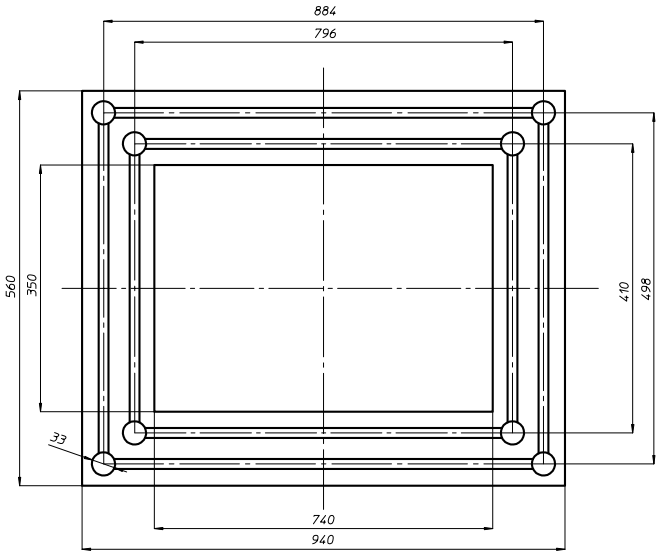
TRM73 — 26 — R

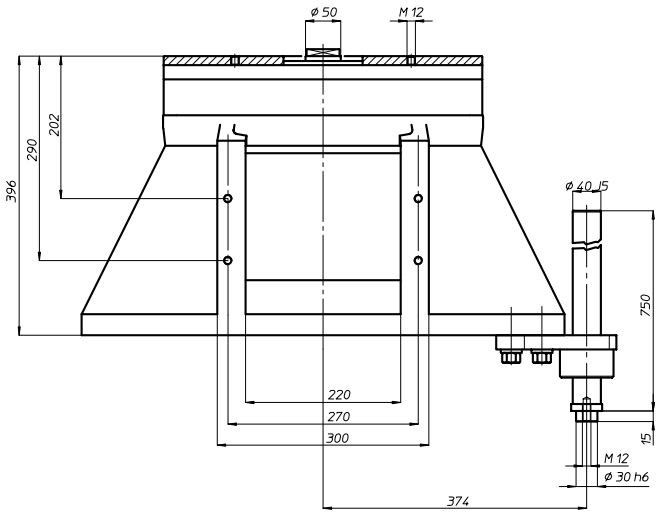
26: prese di moto *drives*

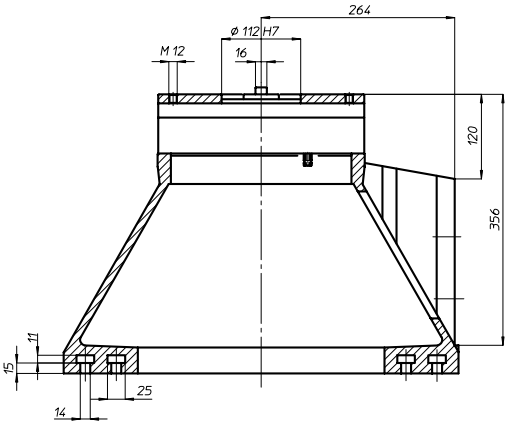
R: presa di moto attacco Rapido *drive quick connection*

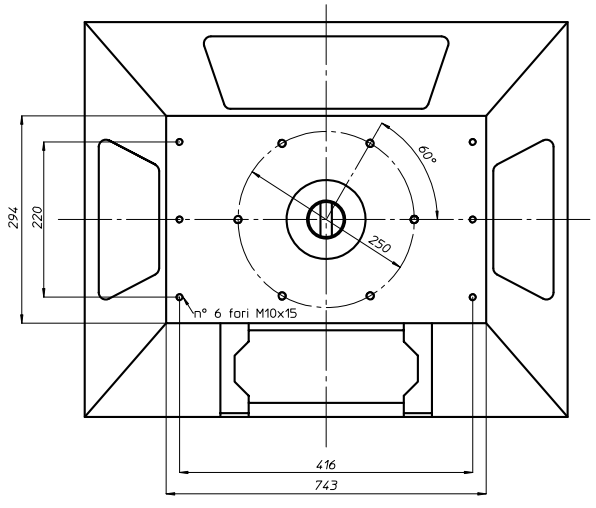


N° prese di moto *Nr. spindle drives*	**26**
Rapporto *Ratio*	**1-1**
Peso *Weight*	**Kg 210**









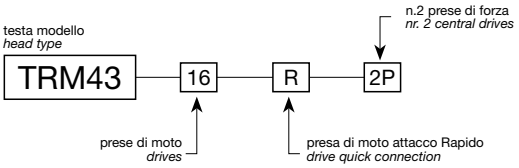
area di lavoro
working area

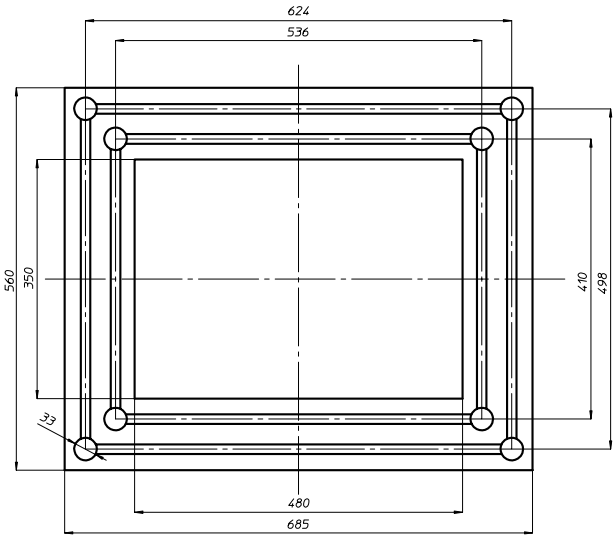
300 x 700

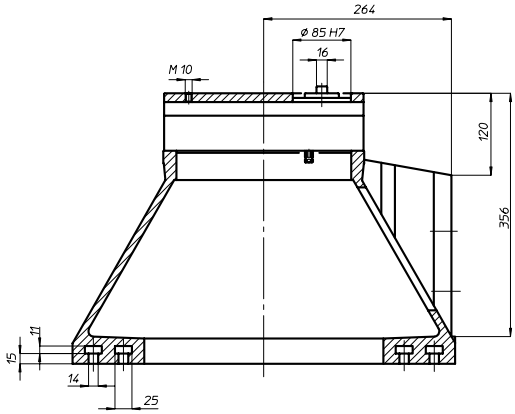
TRM43-2P

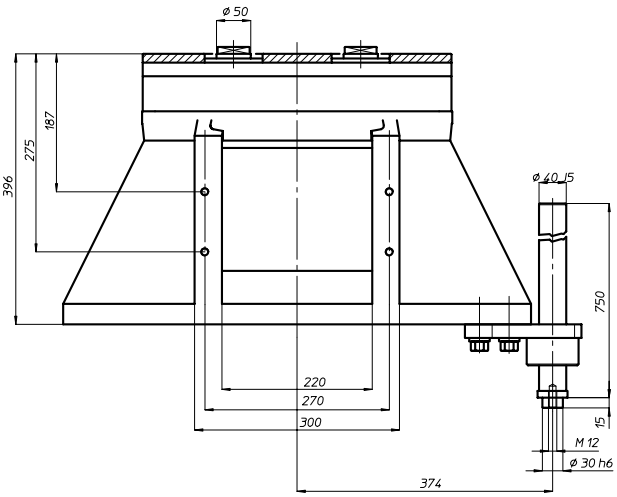
N° prese di moto *Nr. spindle drives*	**8+8**
Rapporto *Ratio*	**1-1**
Peso *Weight*	**Kg 140**

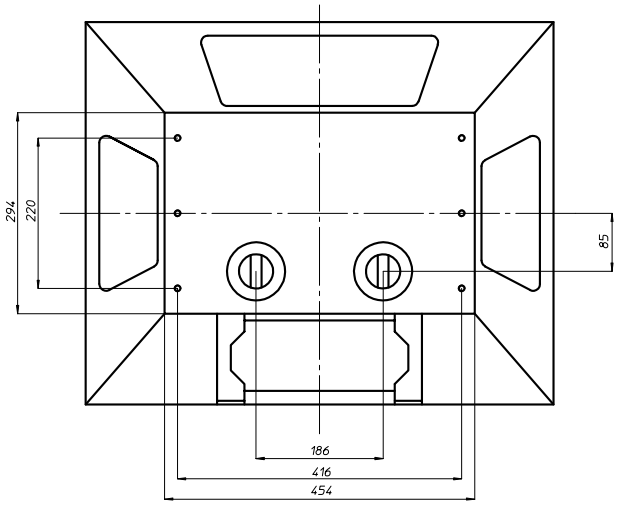
Codice testa
Head code







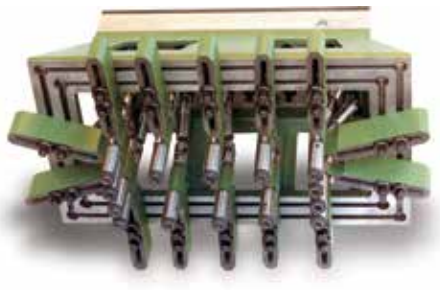




area di lavoro
working area

300 x 440

TRM73-2P



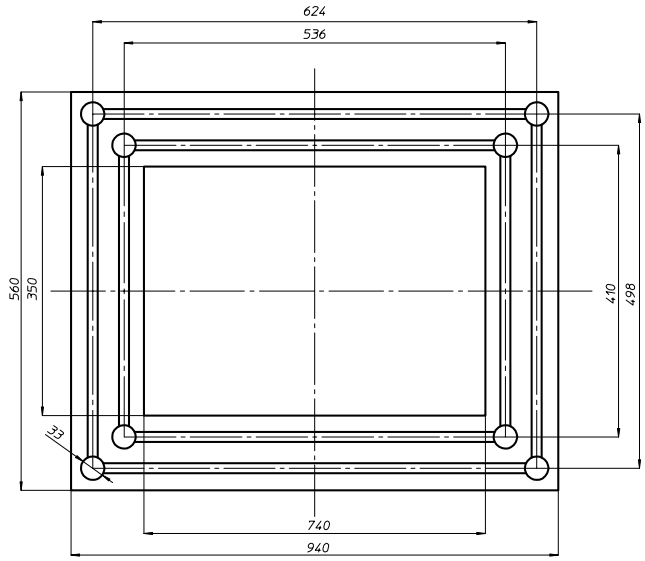
Codice testa
Head code

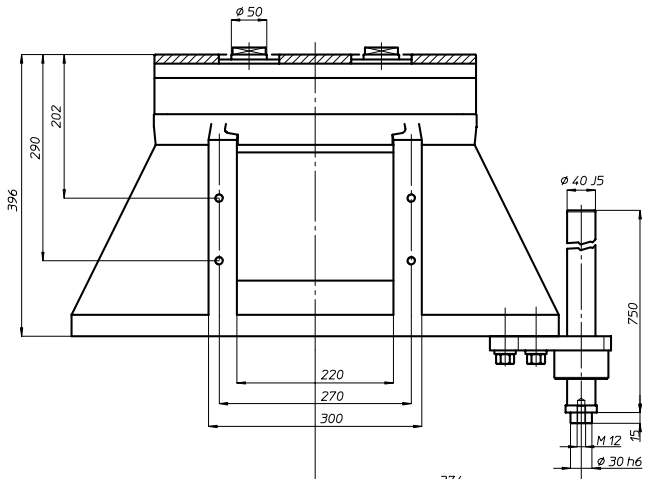
testa modello
head type

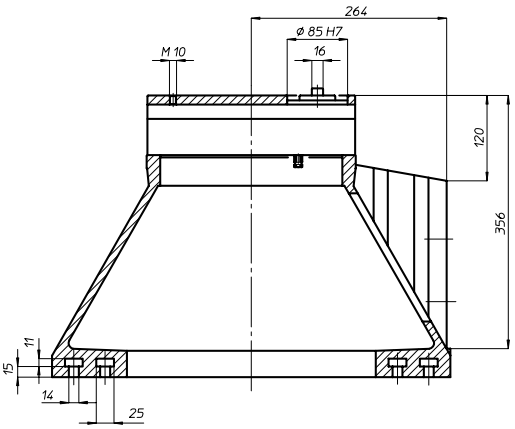
TRM73 — 26 — R — 2P

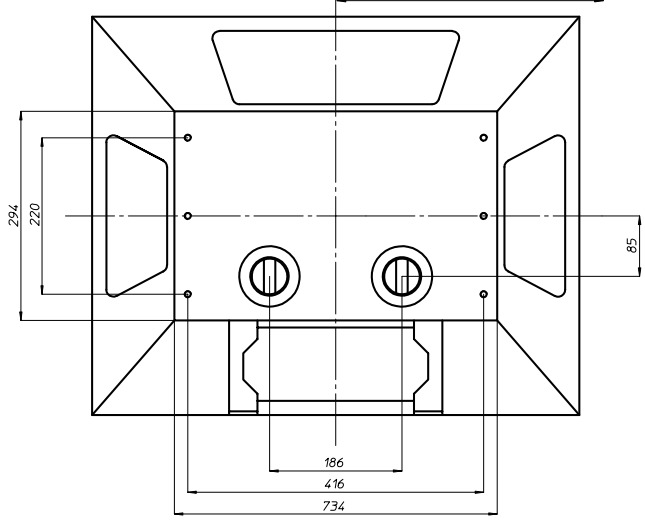
- 26: prese di moto *drives*
- R: presa di moto attacco Rapido *drive quick connection*
- 2P: n.2 prese di forza *nr. 2 central drives*

N° prese di moto *Nr. spindle drives*	**13+13**
Rapporto *Ratio*	**1-1**
Peso *Weight*	**Kg 210**







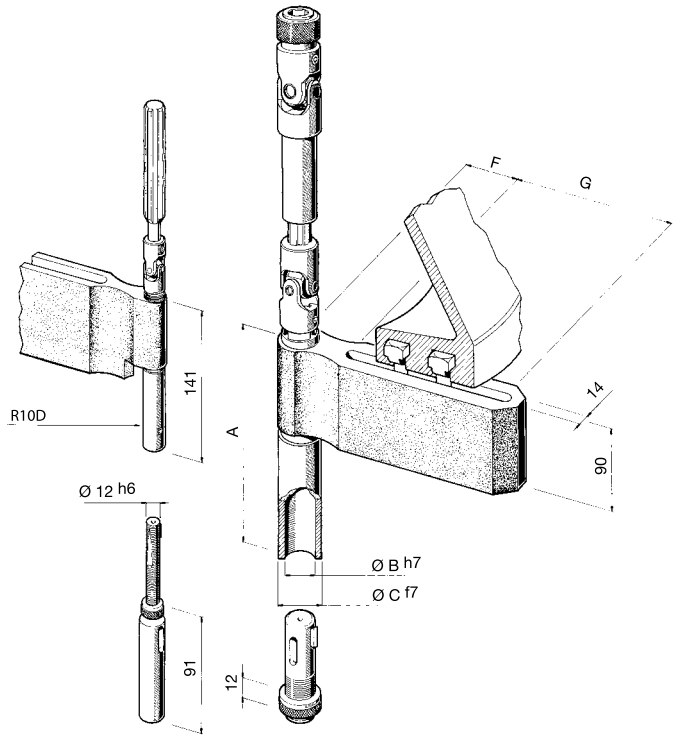


area di lavoro
working area

300 x 700

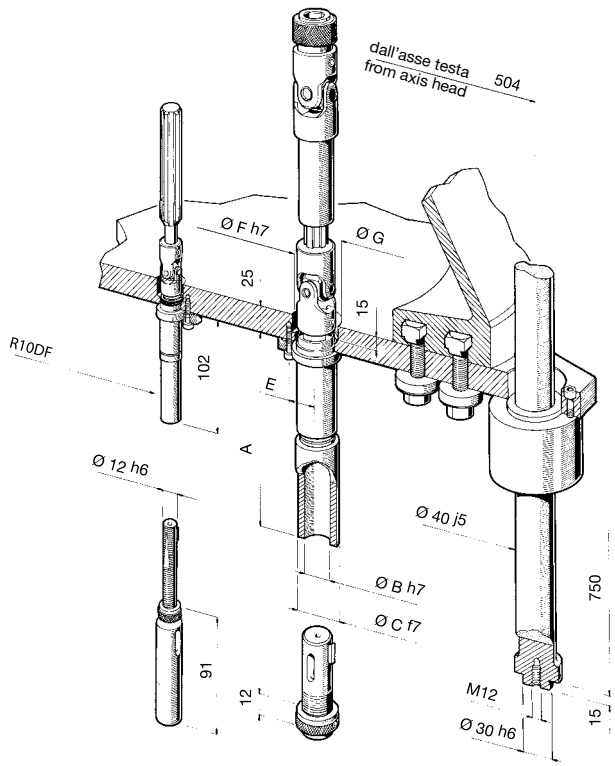
solo per teste TM-TRM
for TM-TRM heads only

su staffa - *on arm*



Tipi mandrini *spindles type*	10D	12D	15D	18D	22D	25D
Codice *code*	R10D-S5 R10D-S6	R12D-S5 R12D-S6	R15D-S5 R15D-S6	R18D-S5 R18D-S6	R22D-S5 R22D-S6	R25D-S5 R25D-S6
Capacità foratura *drilling capacity* acciaio R=500 N/mm	8	10	13	16	20	22
ghisa: GG25	10	12	15	18	22	25
Capacità maschiatura *tapping*	M6	M8	M12	M14	M16	M18
A	127	181	185	194	195	232
ØB h7	12	16	20	25	28	32
ØC f7	20	25	32	37	40	45
F	59	55	55	55	55	60
G	200 270	200 270	200 270	200 270	200 270	200 270
Interasse minimo *center distance*	23	28	32,5	37,5	40,5	50
Peso kg *weight*	4,0 4,5	4,7 5,2	5,2 5,7	5,5 6,3	6,6 7,4	8,6 9,5

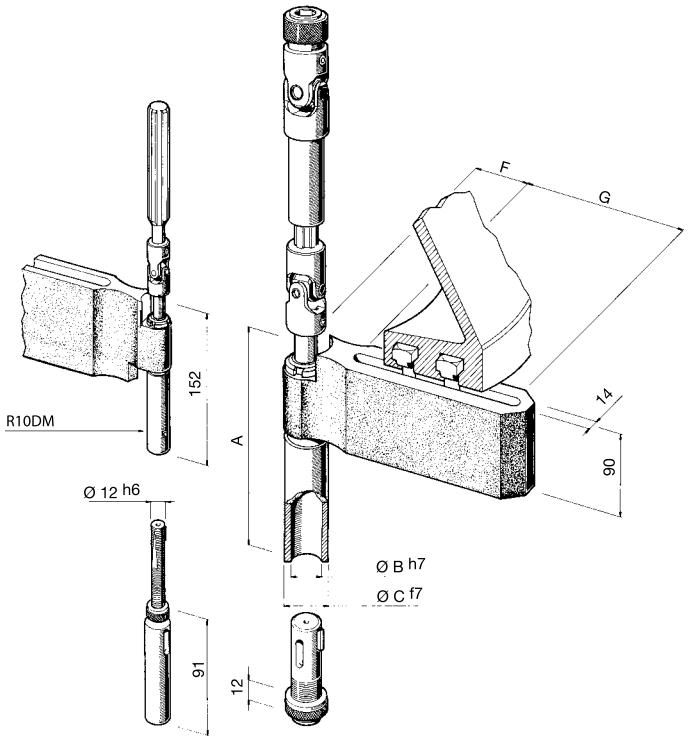
su astuccio per flangia fissa - *fixed plate spindle*



Tipi mandrini *spindles type*	10D	12D	15D	18D	22D	25D
Codice *code*	R10DF	R12DF	R15DF	R18DF	R22DF	R25DF
Capacità foratura *drilling capacity* acciaio R=500 N/mm	8	10	13	16	20	22
ghisa: GG25	10	12	15	18	22	25
Capacità maschiatura *tapping*	M6	M8	M12	M14	M16	M18
A	102	156	160	169	170	207
ØB h7	12	16	20	25	28	32
ØC f7	20	25	32	37	40	45
E Interasse vite M6 *distance screw M6*	18,5	23	25	27,5	29	34
ØF h7	23	27,5	31	36	39	50
ØG	27	32	36	40	44	56
Interasse minimo *center distance*	23,5	28	32,5	37,5	40,5	50,5
Peso kg *weight*	2,0	2,3	2,6	3,4	3,8	5,2

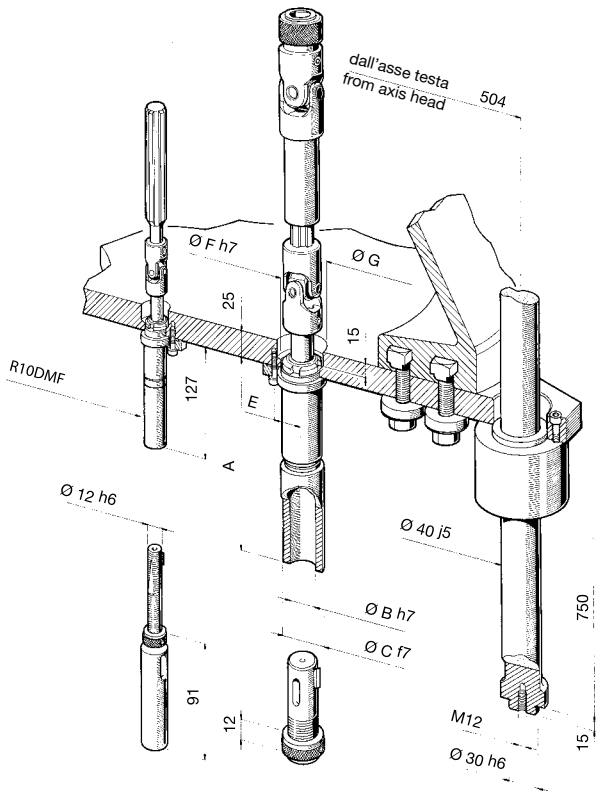
solo per teste TM-TRM
for TM-TRM heads only

su staffa - *on arm*



Tipi mandrini *spindles type*	10DM	15DM	22DM
Codice *code*	R10DM-S5 R10DM-S6	R15DM-S5 R15DM-S6	R22DM-S5 R22DM-S6
Capacità maschiatura *tapping*	M6	M12	M16
Corsa maschiatura *Tapping stroke*	40	40	40
A	152	208	217
ØB h7	12	20	28
ØC f7	20	32	40
F	59	55	55
G	200 270	200 270	200 270
Interasse minimo *center distance*	23	32,5	40,5
Peso kg *weight*	4,0 4,5	5,2 5,7	6,6 7,4

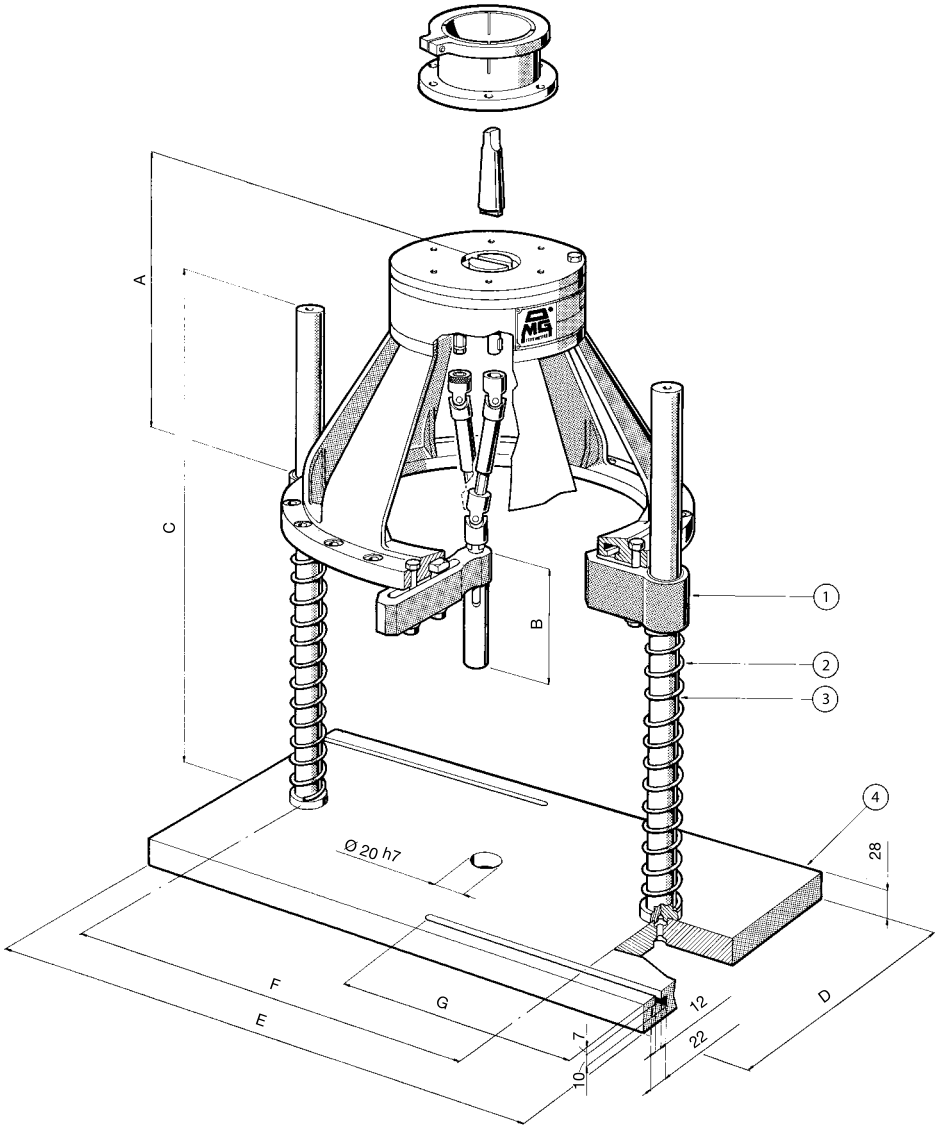
su astuccio per flangia fissa - *fixed plate spindle*



Tipi mandrini *spindles type*	10DM	15DM	22DM
Codice *code*	R10DMF	R15DMF	R22DMF
Capacità maschiatura *tapping*	M6	M12	M16
Corsa maschiatura *Tapping stroke*	40	40	40
A	127	183	192
ØB h7	12	20	28
ØC f7	20	32	40
E Interasse vite M6 *distance crew M6*	18,5	25	29
ØF f7	23	31	39
ØG	27	36	44
Interasse minimo *center distance*	23,5	32,5	40,5
Peso kg *weight*	2,0	2,6	3,8

attrezzature per teste multiple
multispindle heads equipment

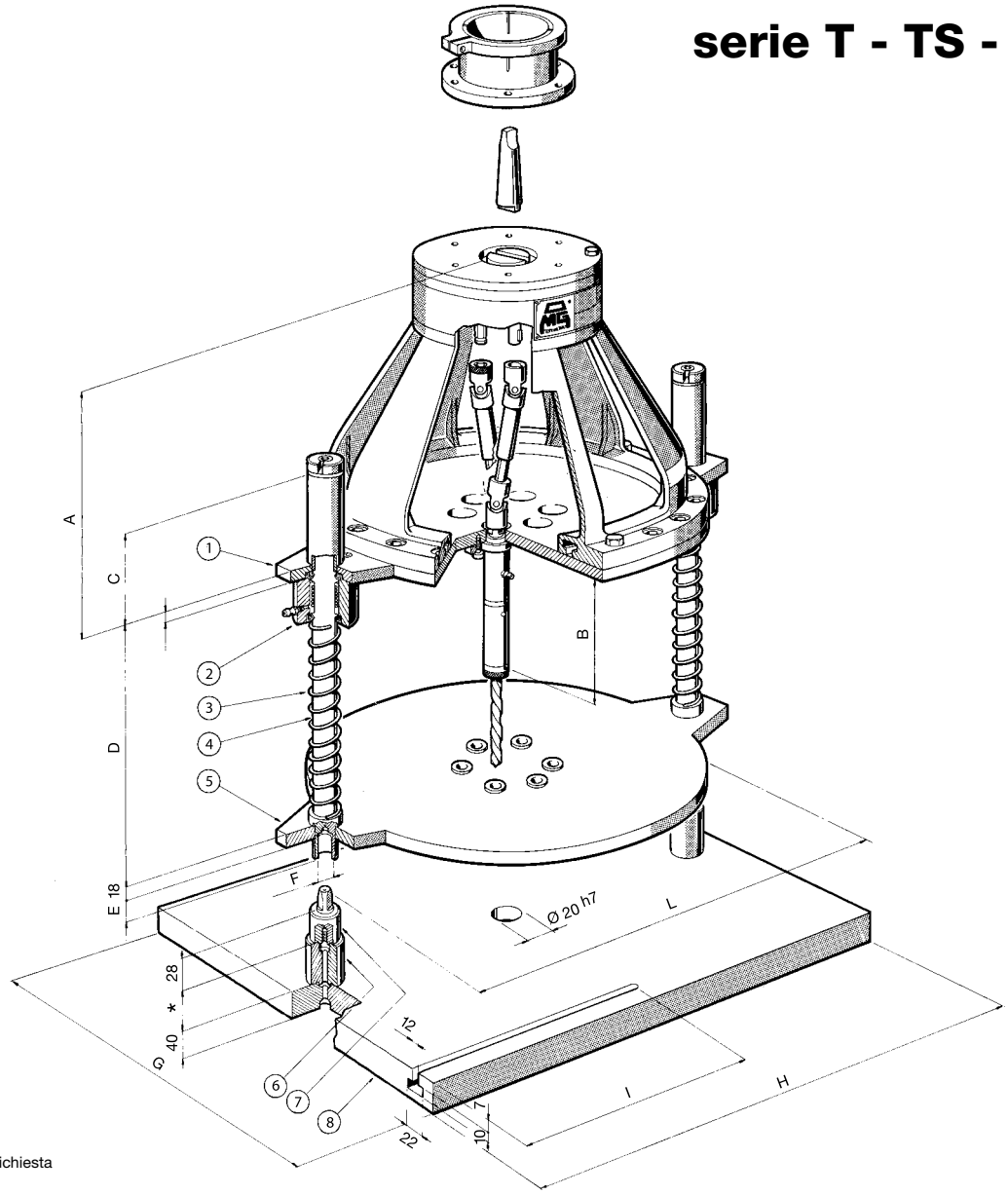
serie T - TS - TL - TR



Modello testa *head type*	A	B		C	D	E	F	G	1 supporto di guida *guide bush*	2 molla *spring*	3 colonna *column*	4 base *base*
		DIN 55058	Pinza ER									
T4	205	91,5	76	500	250	500	280	300	076123	076126	076120	076081
T7	205	101,5	76				350					076082
T10	236	109	94,5				404					076083
T12	260	172		650	300	650	454	350	076133	076136	076130	076084
TS12	283	172					542					076088
T15	272	175					492					076085
TS15	282	175					552					076089
T18	293	185					540					076086
TS18	299	85					582					076090
T22	317	185					540					076087
TS22	317	185					582					076091
TL20/4	237	91,5	76	500	250	500	400	300	076123	076126	076120	076092
TL20/6	237	101,5	76									
TL20/8	237	109	94,5									
TL40/12	290	175		650	300	650	604	350	076133	076136	076130	076093
TL40/16	290	185										
TL40/22	318	185										
TL60/12	290	175				850	804	450	076133	076136	076130	076094
TL60/16	290	185										
TL60/22	318	185										
TR2/12	290	175				650	548		076133	076136	076130	076095
TR2/16	290	185										
TR5/12	290	175					629					076096
TR5/16	290	185										

attrezzature per teste multiple
multispindle heads equipment

serie T - TS - TL - TR



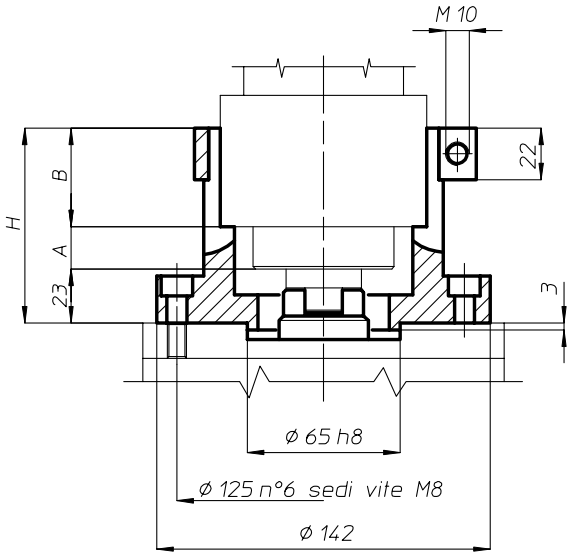
* a richiesta

Modello testa *head type*	A	B		C	D	E	ØFh7	G	H	I	L	1 *fixed plate*	2 *guide bush*	3 *spring*	4 *column*	5 *drilling jig*	6 *spacer*	7 *push-rod*	8 *base*
		DIN 55058	Pinza ER																
T4	205	91,5	76								280	076001				076051			076081
T7	205	101,5	76	70	280	22	10	250	500	300	350	076002	076122	076126	076121	076052	-	076127	076082
T10	236	109	94,5								404	076003				076053			076083
T12	260	172									454	076004				076054			076084
TS12	283	172									542	076005				076055			076085
T15	272	175									492	076006				076056			076086
TS15	282	175									552	076007				076057			076087
T18	293	185		100	405	27	18	300	650	350	540	076008	076132	076136	076131	076058	-	076137	076088
TS18	299	185									582	076009				076059			076089
T22	317	185									540	076010				076060			076090
TS22	317	185									582	076011				076061			076091
TL20/4	237	91,5	76																
TL20/6	237	101,5	76	70	280	22	10	250	500	300	400	076012	076122	076126	076121	076062	-	076127	076092
TL20/8	237	109	94,5																
TL40/12	290	175																	
TL40/16	290	185							650	350	604	076013				076063			076093
TL40/22	318	185																	
TL60/12	290	175																	
TL60/16	290	185							850	450	804	076014				076064			076094
TL60/22	318	185		100	405	27	18	300					076132	076136	076131		-	076137	
TR2/12	290	175																	
TR2/16	290	185							650	350	548	076015				076065			076095
TR5/12	290	175									629	076016				076066			076096
TR5/16	290	185																	

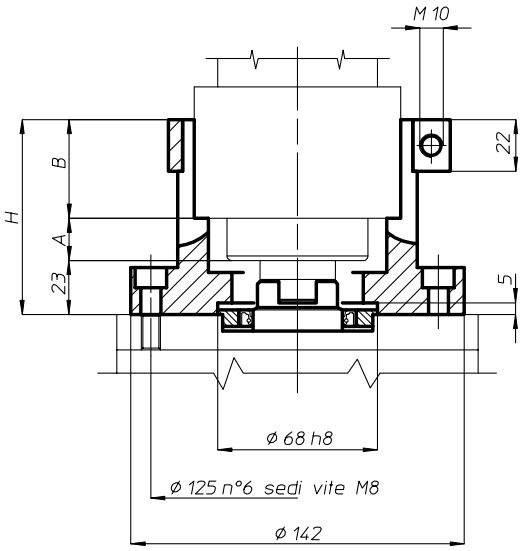
Attacco Cono Morse trascinatore
Morse Taper with driving dog

T4 - T7 - T10 - TL20...

Versione standard
Standard version

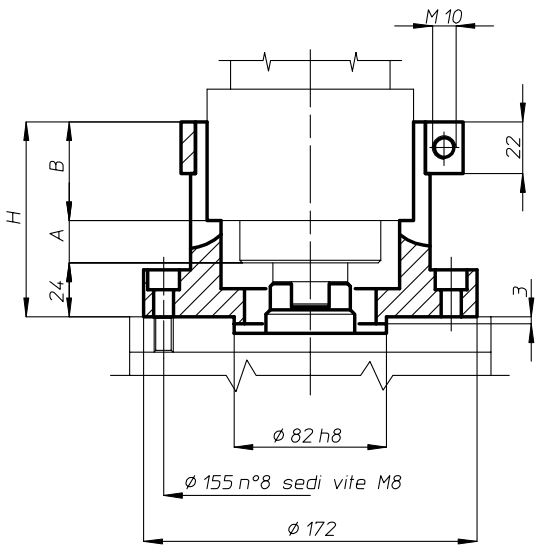
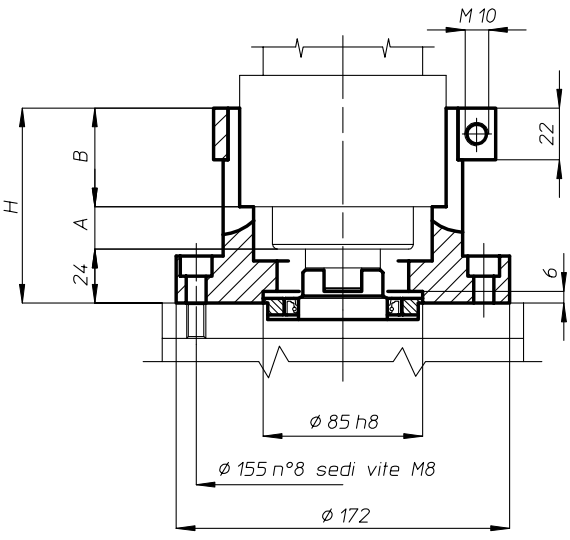


Solo versione orizzontale
For horizontal use only



T12 - T15 - T18 - T22 - TL40... - TL60... - TR2... - TR5...

Versione standard
Standard version



Solo versione orizzontale
For horizontal use only