



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.....	6-2
T4.....	6-3
T7.....	6-4
T10.....	6-5
T12/TS12.....	6-6
T15/TS15.....	6-7
T18/TS18.....	6-8
T22/TS22.....	6-9
TL20/4.....	6-10
TL20/6.....	6-11
TL20/8.....	6-12
TL40/12.....	6-13
TL40/16.....	6-14
TL40/22.....	6-15
TL60/12.....	6-16
TL60/16.....	6-17
TL60/22.....	6-18
TR2/12.....	6-19
TR2/16.....	6-20
TR5/12.....	6-21
TR5/16.....	6-22
TR8/22.....	6-23
TM400.....	6-24
TM500.....	6-25
TRM43.....	6-26
TRM73.....	6-27
TRM43-2P.....	6-28
TRM73-2P.....	6-29
Mandrini per TM-TRM/TM-TRM spindles.....	6-30
Attrezzature/Equipment.....	6-32
Manicotto di collegamento/Connection collar ...	6-34
Accessori/Accessories.....	8-1

TA

MO



T2

Codice testa
Head code

Codice mandrino
Spindle code

HT



N° prese di moto
Nr. spindle drives

08



Rapporto
Ratio

1-1

VH



Capacità di foratura
Drilling capacity

4



Maschiatura
Tapping

M4

TSI/TSX



Attacco utensile
Type of spindle

Pinza ER 8

T



Peso gruppo testa
Head weight

Kg 3,25

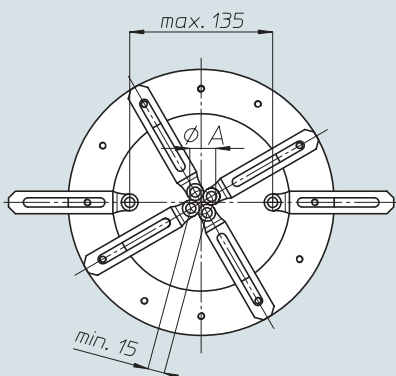


Peso gruppo mandrino
Spindle-set weight

Kg 0,3

MT-TC-TC3

area di lavoro
working area

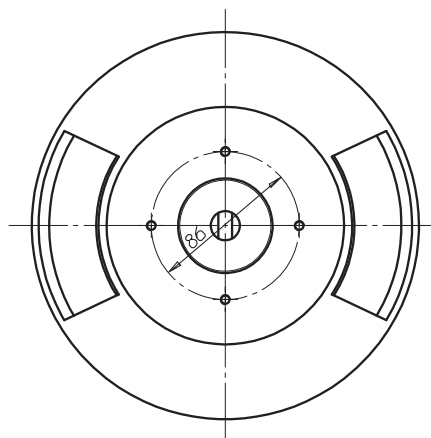
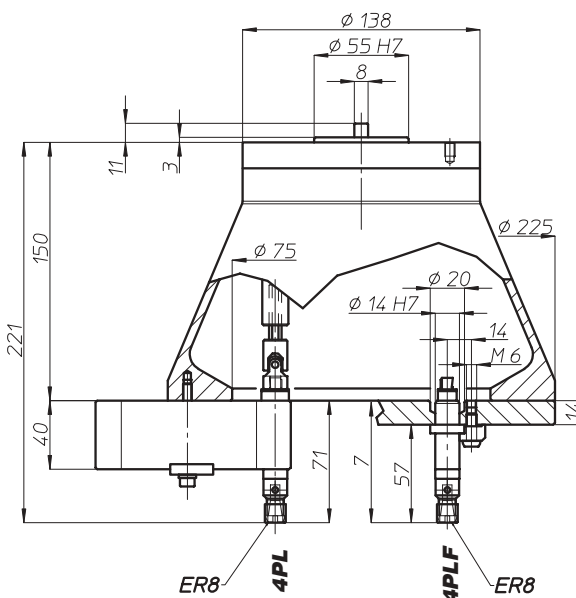
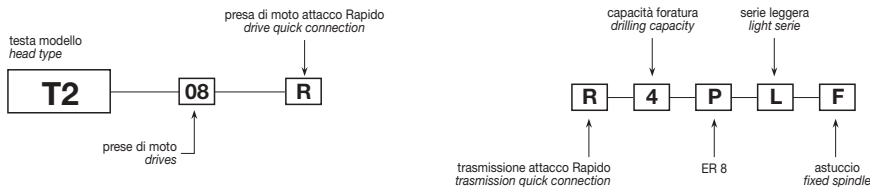


Ø A	n° mandrini
15	2
17,5	3
21,5	4
26	5
30	6
35	7
39,5	8

6-2

Accessori
Accessories

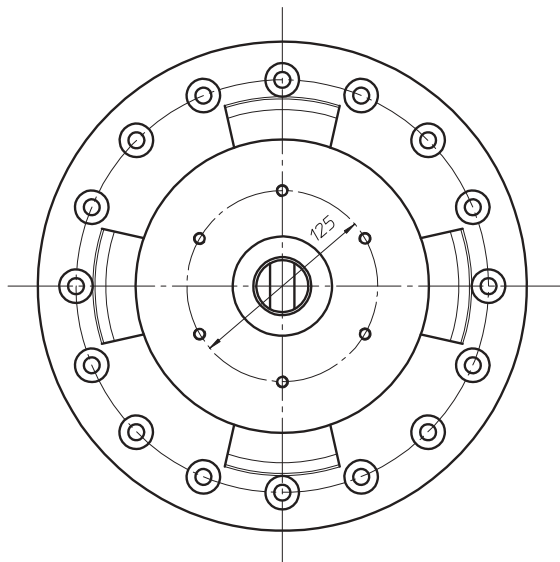
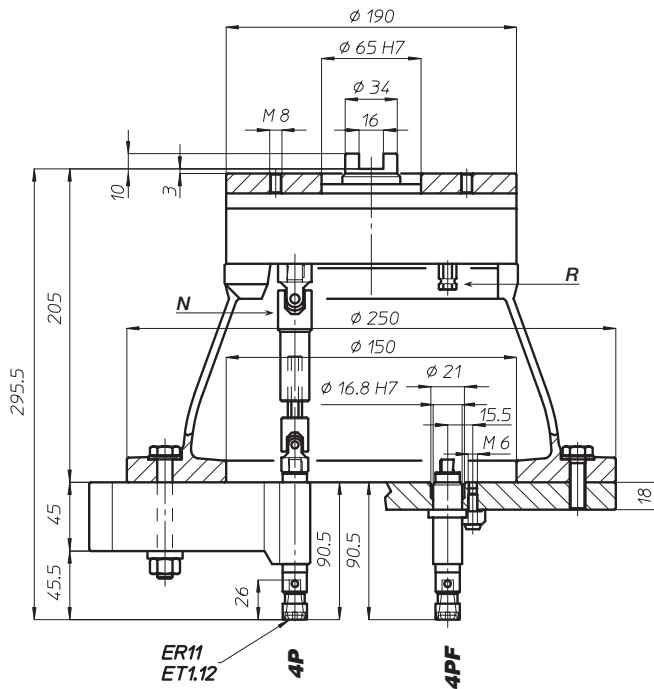
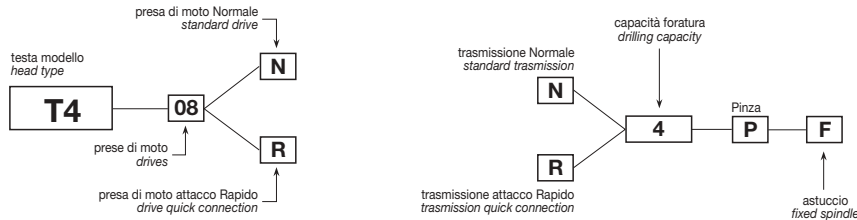
Appendice tecnica
Technical supplement



T4

Codice testa
Head code

Codice mandrino
Spindle code



N° prese di moto
Nr. spindle drives

08-12



Rapporto
Ratio

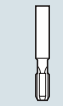
1-1



Capacità di foratura
Drilling capacity

acciaio R=500 N/mm²
ghisa: GG25

4
5



Maschiatura
Tapping

M4



Attacco utensile
Type of spindle

P Pinza ER11



Peso gruppo testa
Head weight

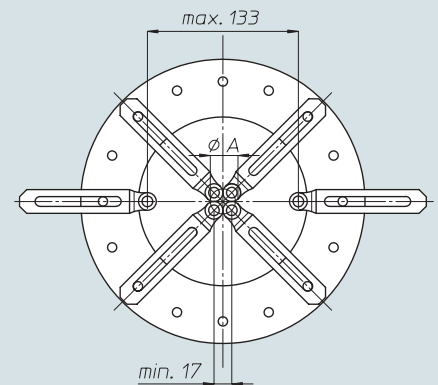
Kg 9,5



Peso gruppo mandrino
Spindle-set weight

Kg 1

area di lavoro
working area



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

6-3

TA

MO

HT

VH

TSI/TSX

T

MT-TG-TC3

Accessori
Accessories

Appendice tecnica
Technical supplement

TA

MO



T7

Codice testa
Head code

Codice mandrino
Spindle code

HT



N° prese di moto
Nr. spindle drives

08-12

VH

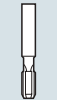


Capacità di foratura
Drilling capacity

acciaio R=500 N/mm²
ghisa: GG25

6
7

TSI/TSX



Maschiatura
Tapping

M5

T



Peso gruppo testa
Head weight

Kg 10

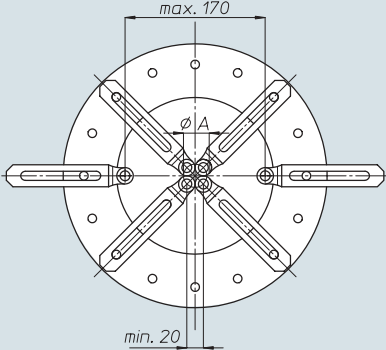


Peso gruppo mandrino
Spindle-set weight

Kg 1,1

MT-TC-TC3

area di lavoro
working area

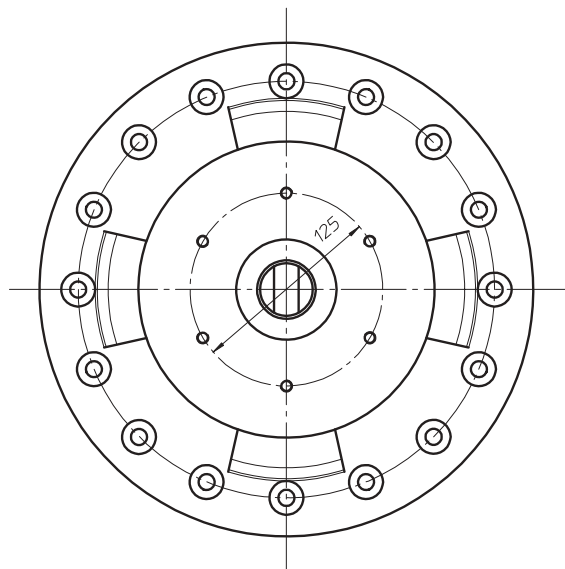
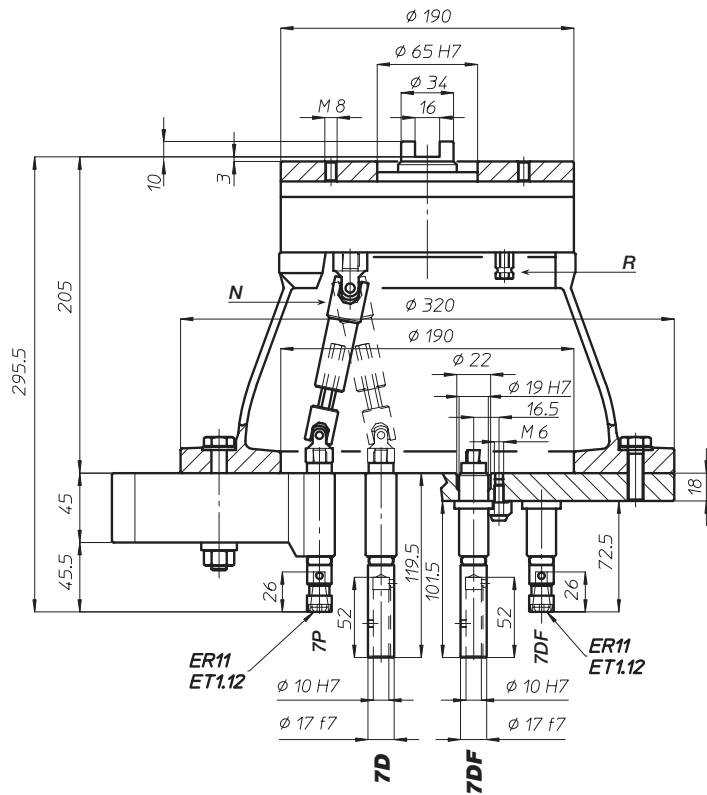
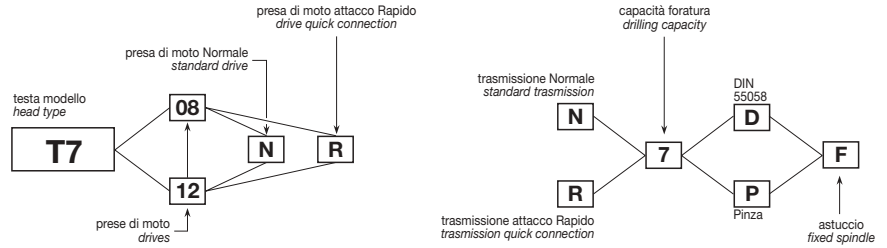


Ø A	n° mandrini
23,5	3
28,5	4
34,5	5
40,5	6
46,5	7
52,5	8
59	9
65,5	10
71,5	11
77,5	12

6-4

Accessori
Accessories

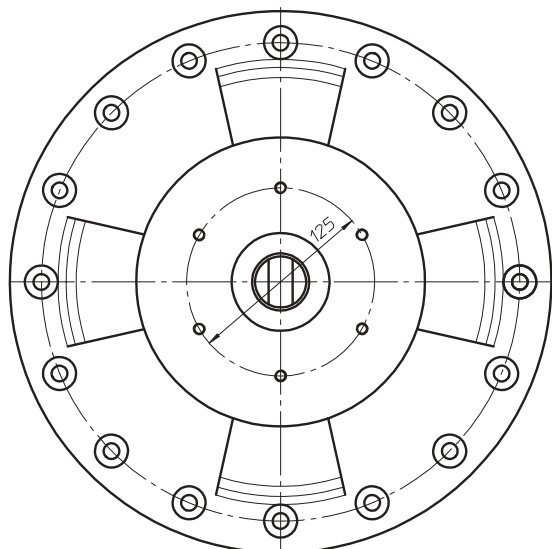
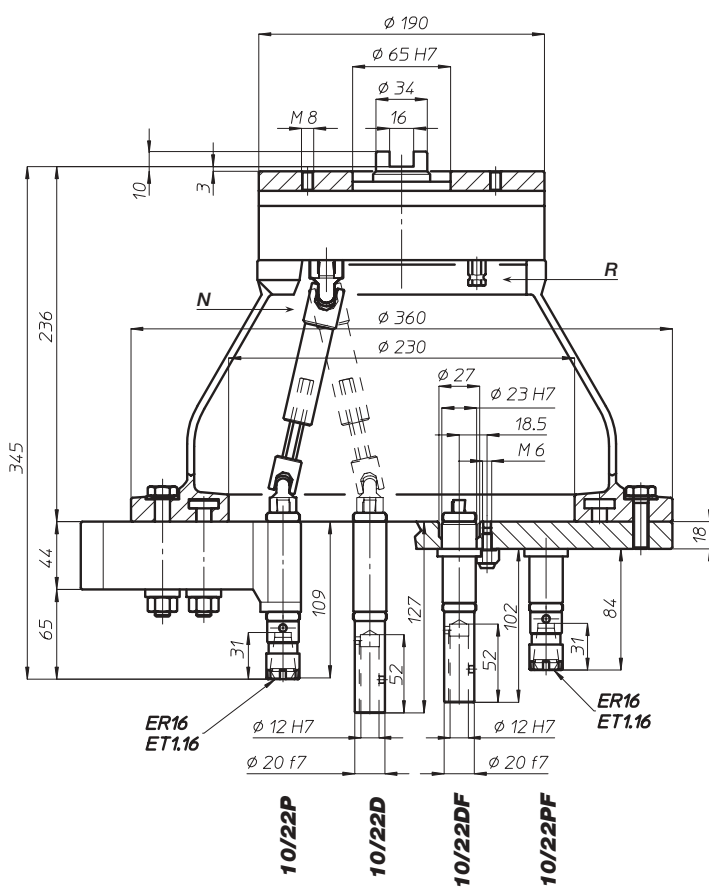
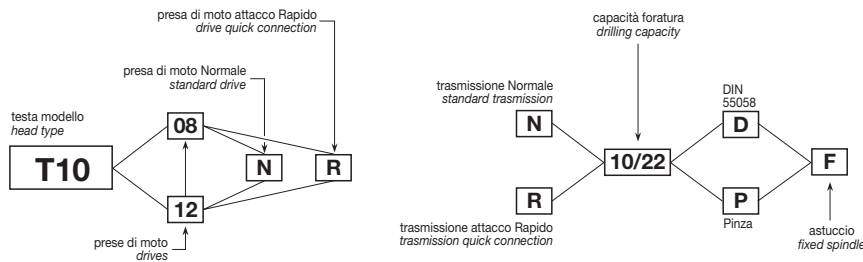
Appendice tecnica
Technical supplement



T10

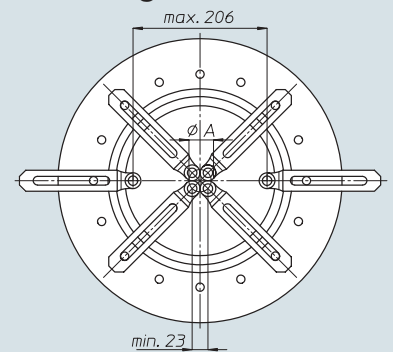
Codice testa
Head code

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/mm ² 8 ghisa: GG25 10
	Maschiatura Tapping	M6
	Attacco utensile Type of spindle	D DIN 55058 Ø12 P Pinza 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
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

TA

MO



T12-TS12

Codice testa
Head code

Codice mandrino
Spindle code

HT



N° prese di moto
Nr. spindle drives

08-12

VH



Rapporto
Ratio

1-1

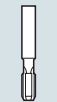
TSI/TSX



Capacità di foratura
Drilling capacity

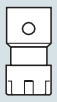
acciaio R=500 N/mm²
ghisa: GG25

10
12



Maschiatura
Tapping

M8



Attacco utensile
Type of spindle

D DIN 55058 Ø16

T



Peso gruppo testa
Head weight

T12: Kg 20
TS12: Kg 22,5

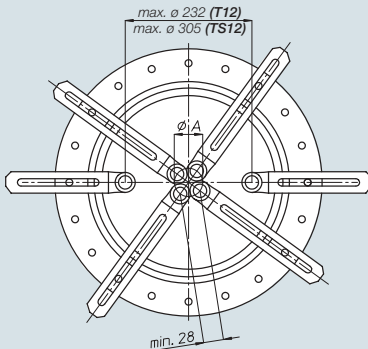


Peso gruppo mandrino
Spindle-set weight

Kg 2

MT-TC-TC3

area di lavoro
working area



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

6-6

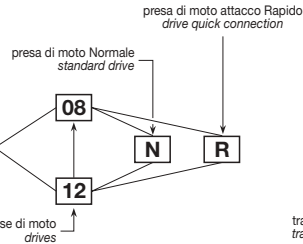
Accessori
Accessories

Appendice tecnica
Technical supplement

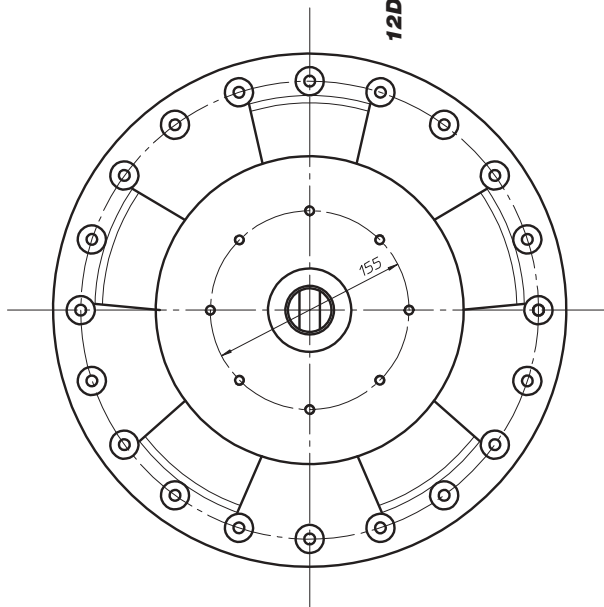
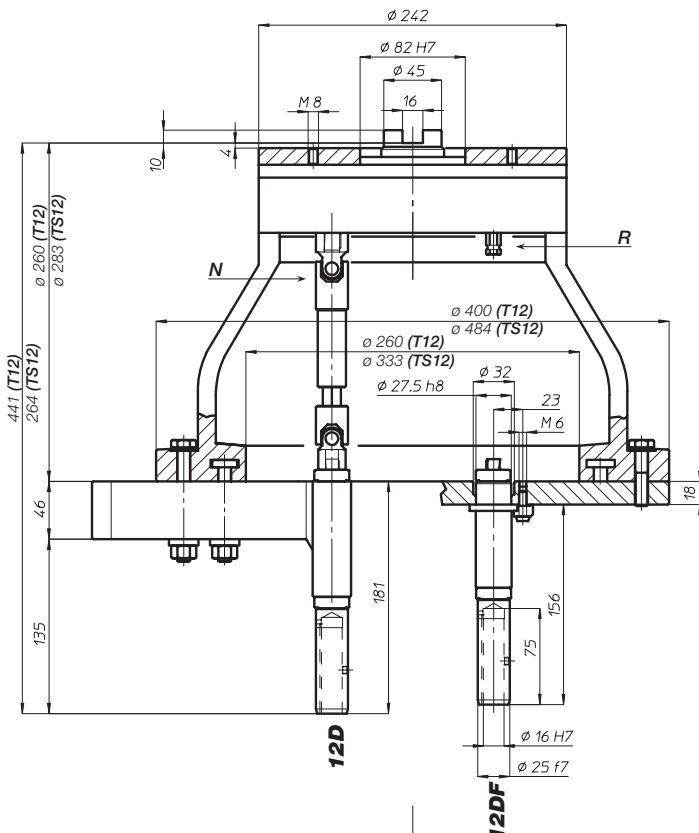
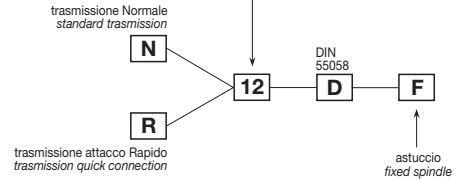
testa modello
head type

T12

TS12



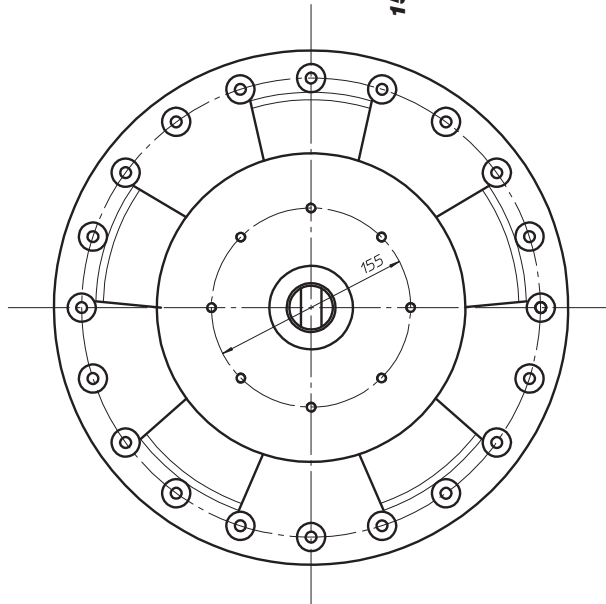
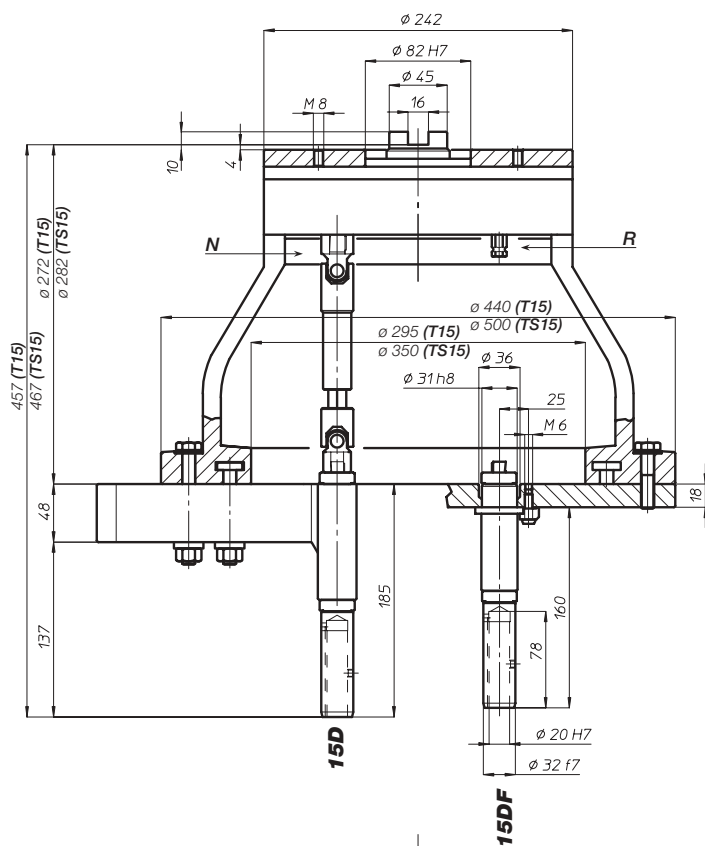
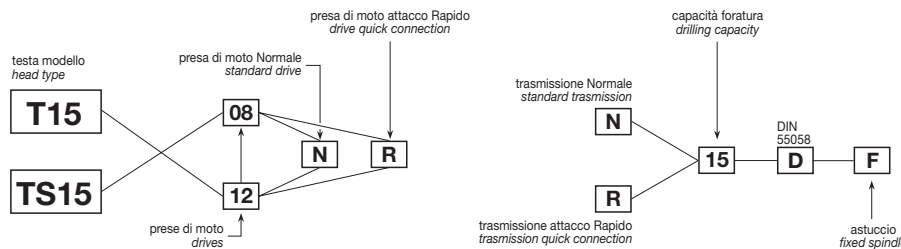
capacità foratura
drilling capacity



T15-TS15

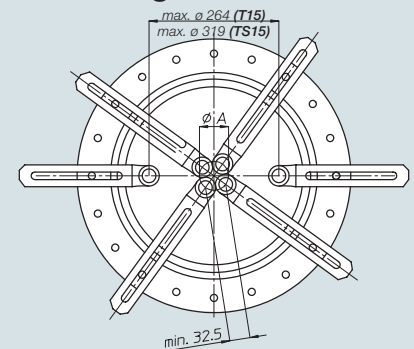
Codice testa
Head code

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/mm ² 13 ghisa: GG25 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
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

TA

MO



T18-TS18

Codice testa
Head code

Codice mandrino
Spindle code

HT



N° prese di moto
Nr. spindle drives

08

VH



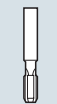
Capacità di foratura
Drilling capacity

acciaio R=500 N/mm²
ghisa: GG25

16

18

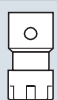
TSI/TSX



Maschiatura
Tapping

M14

T



Attacco utensile
Type of spindle

D DIN 55058 Ø25



Peso gruppo testa
Head weight

T18: Kg 25
TS18: Kg 26,5

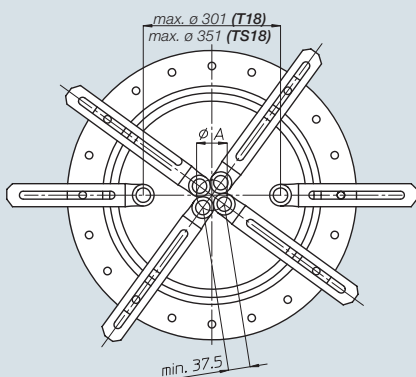


Peso gruppo mandrino
Spindle-set weight

Kg 3,3

MT-TG-TC3

area di lavoro
working area



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

6-8

testa modello
head type

T18

TS18

presa di moto Normale
standard drive

N

08

prese di moto
drives

R

presa di moto attacco Rapido
drive quick connection

capacità foratura
drilling capacity

trasmissione Normale
standard trasmission

N

R

18

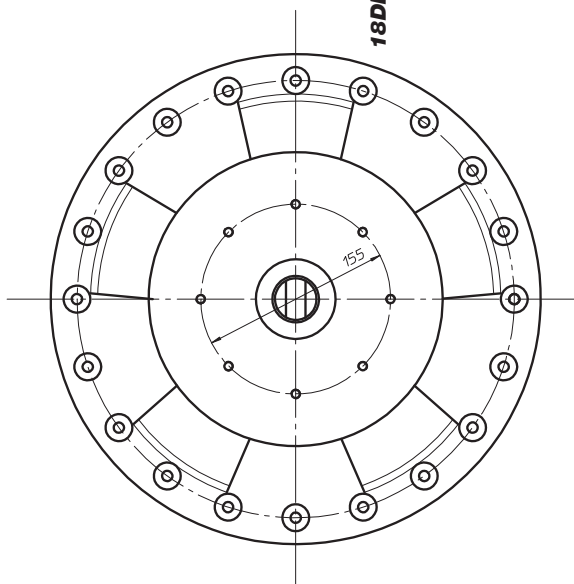
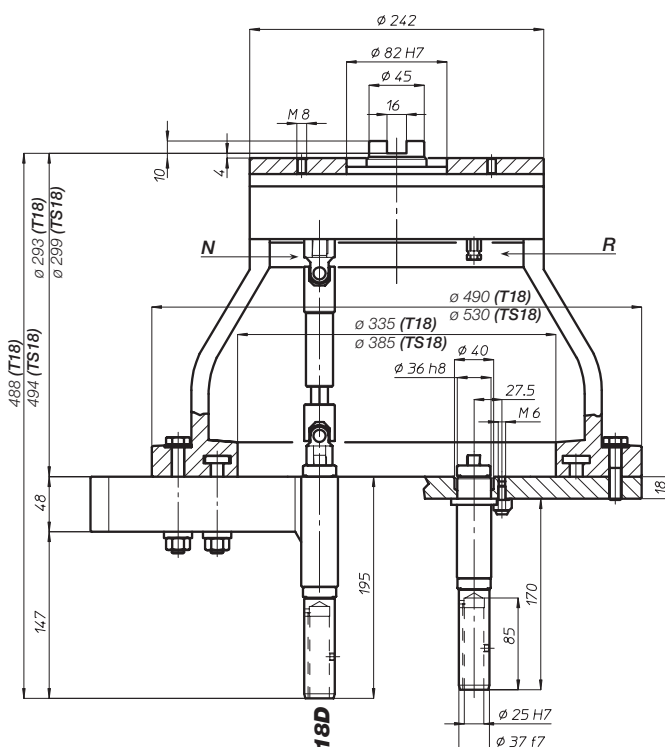
DIN
55058

D

F

trasmissione attacco Rapido
transmission quick connection

astuccio
fixed spindle



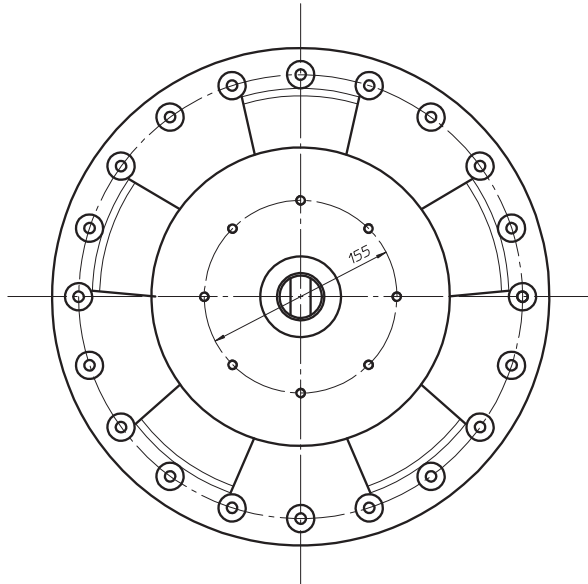
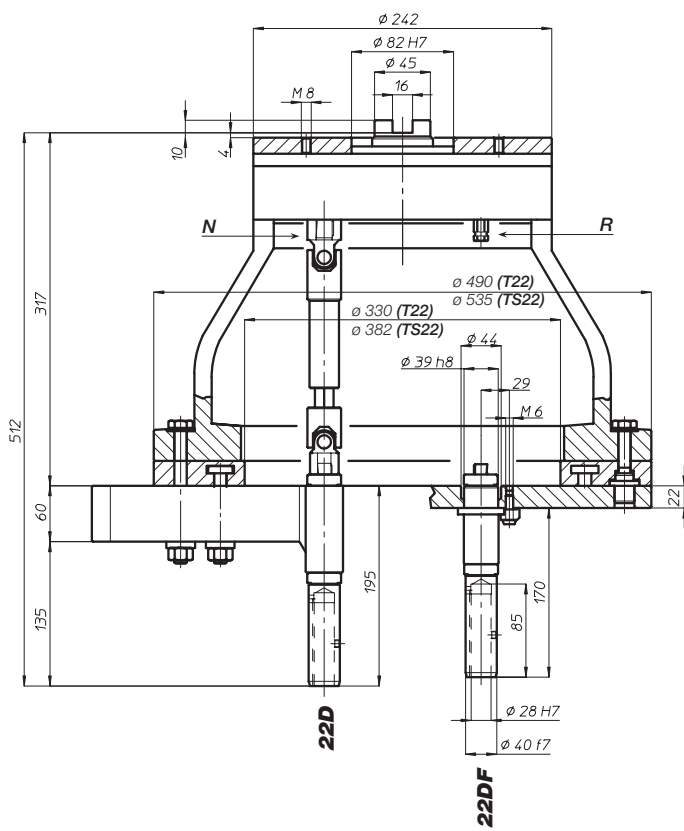
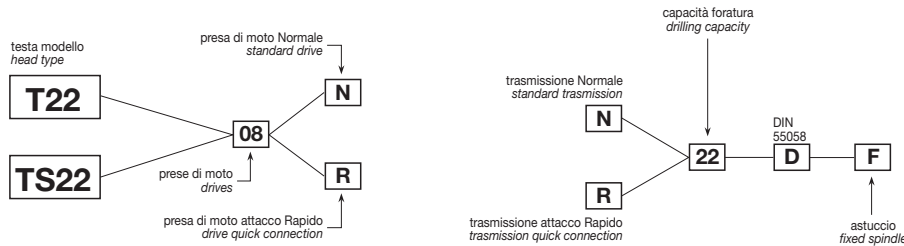
Accessori
Accessories

Appendice tecnica
Technical supplement

T22-TS22

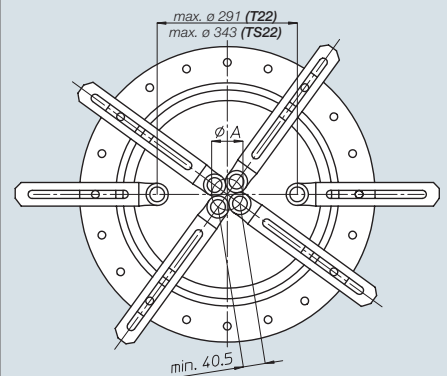
Codice testa
Head code

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/mm ² 20 ghisa: GG25 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
47,5	3
58	4
69,5	5
81,5	6
94	7
106,5	8

6-9

TA

MO

HT

VH

TSI/TSX

T

MT-TC-TC3

Accessori
Accessories

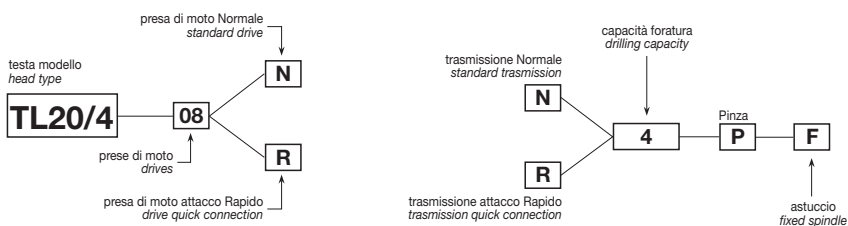
Appendice tecnica
Technical supplement

TL20/4



Codice testa
Head code

Codice mandrino
Spindle code



TA

MO

HT

VH

TSI/TSX

T

MT-TC-TC3

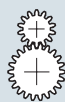
Accessori
Accessories

Appendice tecnica
Technical supplement



N° prese di moto
Nr. spindle drives

08



Rapporto
Ratio

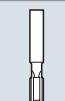
1-1



Capacità di foratura
Drilling capacity

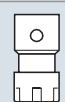
acciaio R=500 N/mm²
ghisa: GG25

4
5



Maschiatura
Tapping

M4



Attacco utensile
Type of spindle

P

Pinza ER11



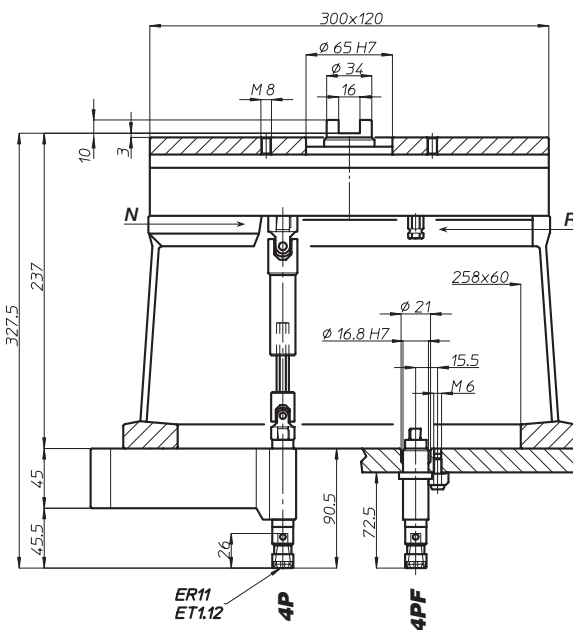
Peso gruppo testa
Head weight

Kg 13,5

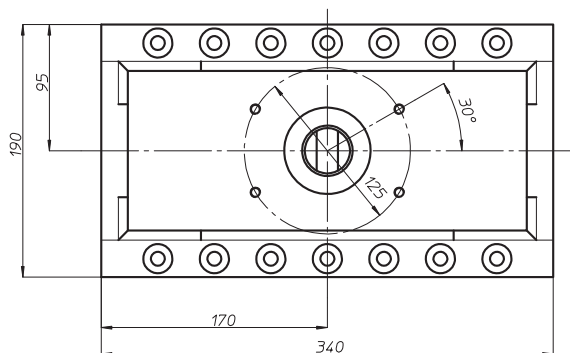
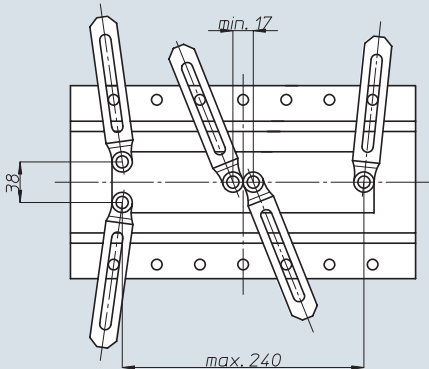


Peso gruppo mandrino
Spindle-set weight

Kg 1



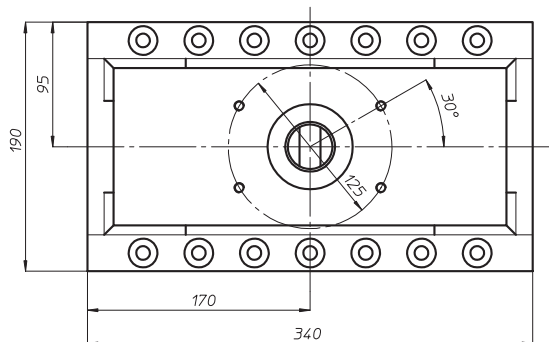
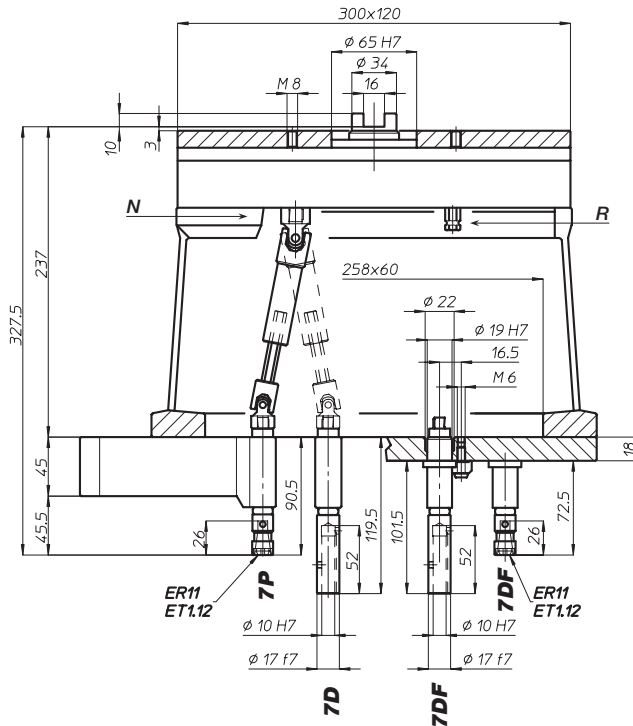
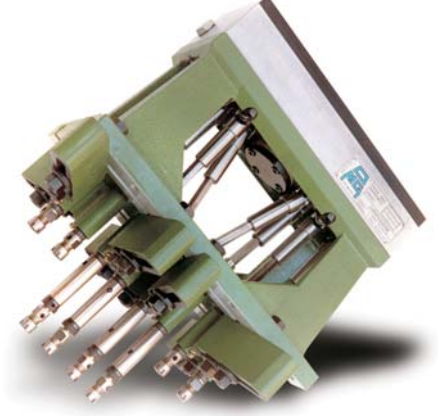
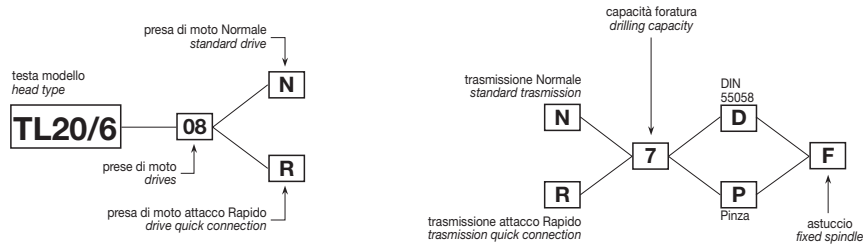
area di lavoro
working area



TL20/6

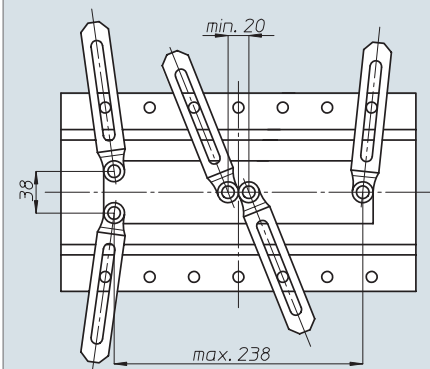
Codice testa
Head code

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/mm ² ghisa: GG25
	Maschiatura Tapping	M5
	Attacco utensile Type of spindle	D DIN 55058 Ø10 P Pinza ER11
	Peso gruppo testa Head weight	Kg 13,5
	Peso gruppo mandrino Spindle-set weight	Kg 1

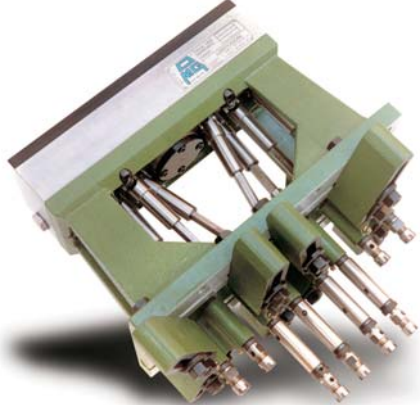
area di lavoro
working area



TL20/8

TA

MO



Codice testa
Head code

Codice mandrino
Spindle code

HT



N° prese di moto
Nr. spindle drives

08

VH

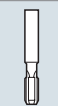


Capacità di foratura
Drilling capacity

acciaio R=500 N/mm²
ghisa: GG25

8
10

TSI/TSX



Maschiatura
Tapping

M6

T



Peso gruppo testa
Head weight

Kg 13,5



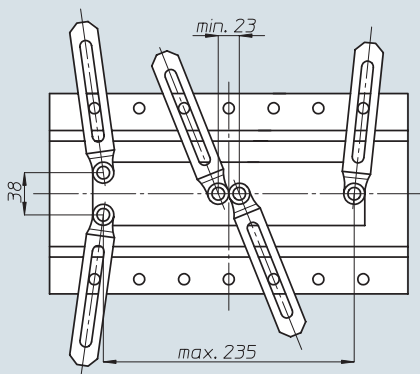
Peso gruppo mandrino
Spindle-set weight

Kg 1,5

MT-TC-TC3

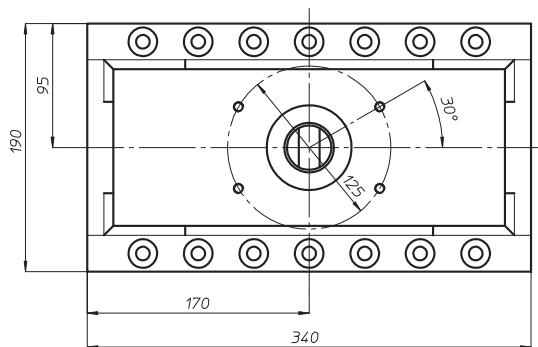
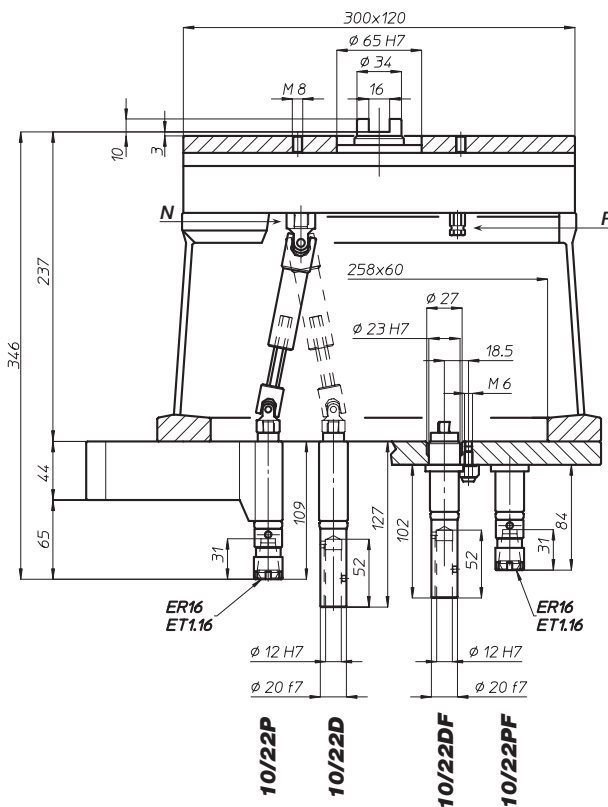
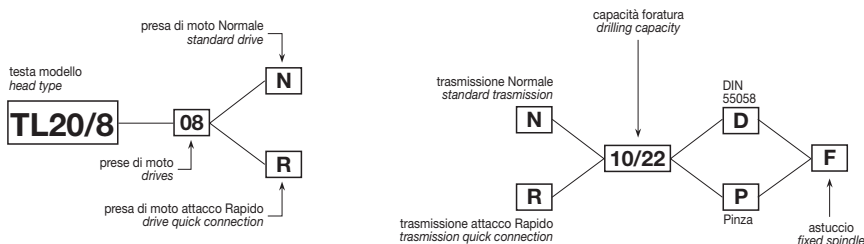
Accessori
Accessories

area di lavoro
working area



Appendice tecnica
Technical supplement

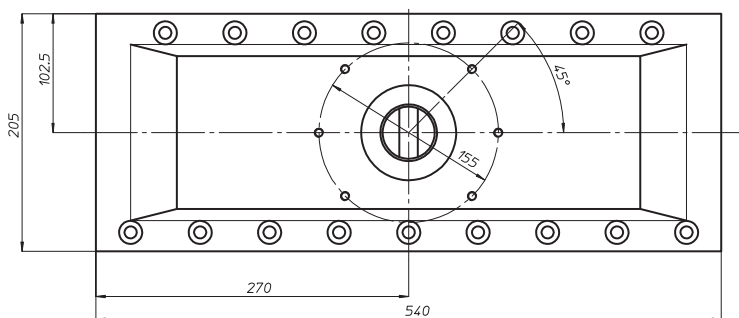
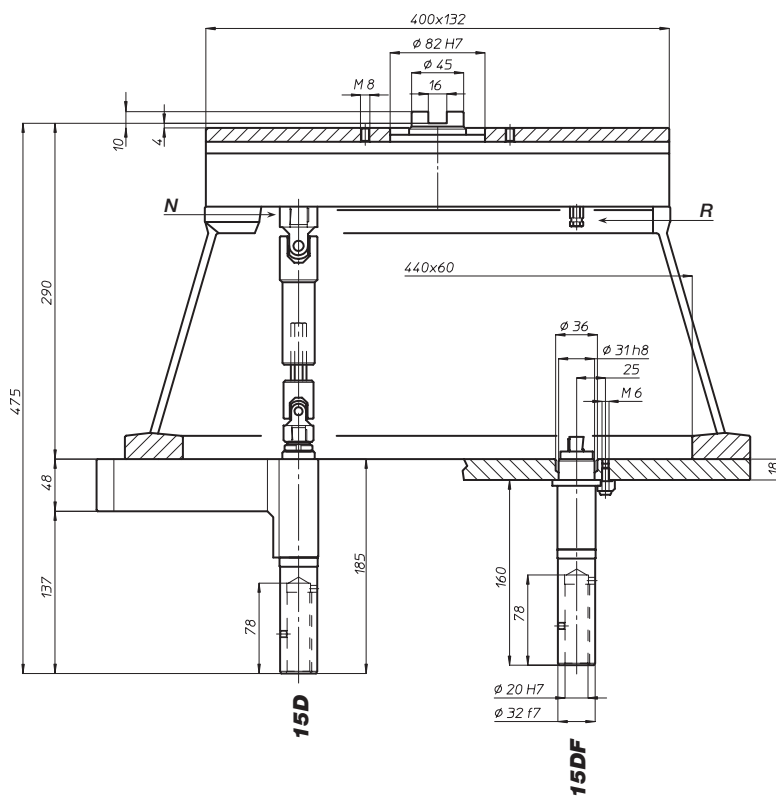
6-12



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/mm ² 13 ghisa: GG25 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

