MD MG TESTE MULTIPLE

Made in Italy

FH *Facing Heads* · **BAH** *Big Angle Heads* · **TA.CP** *Angle Heads* · **TA** *Angle Heads* · **MOx** *Spindle Speeders* · **HT** *Turret Heads* · **VH** *Variable axis heads* · **TSI/TSX** *Twin spindle milling heads* · **T** *Adjustable joint multi spindle heads* · **MT-TC-TC3** *Fixed multi spindle heads*



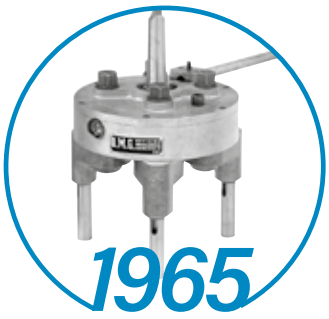
SERIE

VH





Le teste multiple ad assi variabili raggiungono velocità di 4000 rpm, forando fino a 25 mm e maschiando M20. Il corpo testa è in lega di alluminio, ingranaggi e mandrini in acciaio trattati termicamente e rettificati per una maggiore precisione e resistenza all'usura. Disponibili in 31 differenti modelli, a 2,3,4 mandrini o con 1 solo mandrino decentrato, coprono interassi variabili da un minimo di 12 mm ad un massimo di 300 mm. Soluzioni personalizzate sono comunque sempre possibili anche in questa fascia di teste standard. L'utilizzo principale è su macchine o unità foratrici e maschiatrici, raramente su macchine CNC.







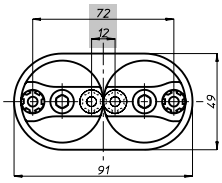
The variable axis multispindle heads are able to achieve a speed of 4000 rpm, drilling up to 25 mm and tapping M20. The head body is made of aluminium alloy, the gears and spindles are made of steel which has undergone heat treatment and has been ground for greater precision and wear resistance. Available in 31 different models, with 2,3,4 spindles or just one decentralised spindle, they cover a range of centre distances from minimum 12 mm to maximum 300 mm. Customised solutions are in any case also available within this range of standard heads. They are mainly used on drilling and tapping units, but rarely on CNC machines.

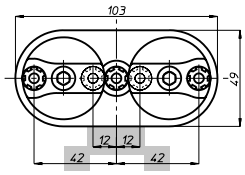
VH04

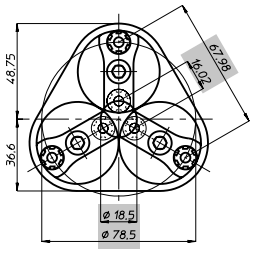
TESTE MULTIPLE AD ASSI VARIABILI • *VARIABLE AXIS HEADS*

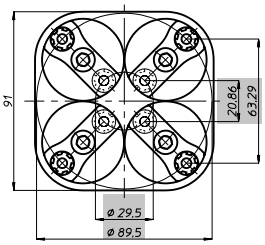
Ø5 CAPACITÀ FORATURA
DRILLING CAPACITY





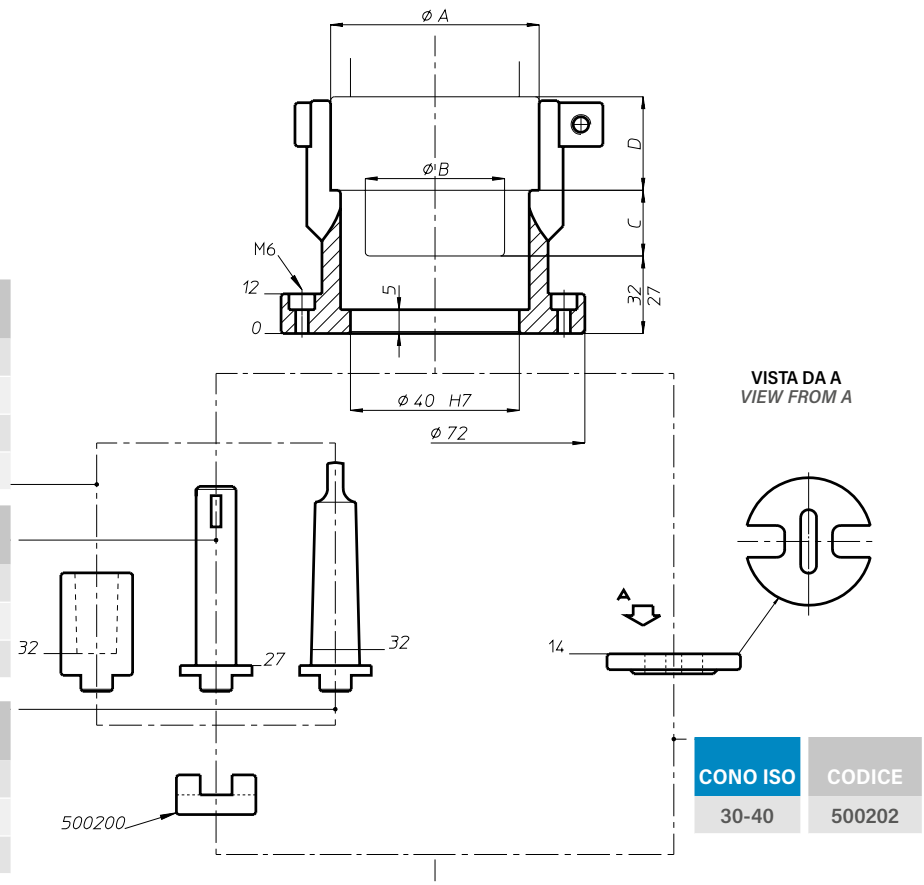






TESTA MODELLO *HEAD TYPE*	VH 042	VH 043 L	VH 043	VH 044
ARTICOLO *ITEM*	VH 042 P	VH 043 LP	VH 043 P	VH 044 P
ATTACCO UTENSILE *SPINDLE TYPE*	ER 8 - max ø 5			
ARTICOLO *ITEM*				
ATTACCO UTENSILE *SPINDLE TYPE*				
N. MANDRINI *SPINDLES NR.*	2	3	3	4
CAMPO DI LAVORO MIN. *CENTRE DISTANCES MIN.*	12	12+12	ø 18,5	ø 29,5
CAMPO DI LAVORO MAX. *CENTRE DISTANCES MAX.*	72	42+42	ø 78,5	ø 89,5
CAPACITÀ FORATURA *DRILLING CAPACITY*	**ACCIAIO**/*STILL* Rm 500 N/mm² - ø 4 | **GHISA**/*CAST IRON* GG25 - ø 5			
MASCHIATURA *TAPPING*	M 3			
RAPPORTO *RATIO*	1 - 1			
VELOCITÀ *RPM*	4.000			
PESO *WEIGHT*	0,95 kg	1,05 kg	1,4 kg	1,9 kg

NOTA: NOTE: A.B.C.D. DATI MACCHINA / *A.B.C.D. MACHINE FEATURES*



DIN 238	CODICE
B 10	011277
B 12	011278
B 16	011279
B 18	011280

DIN 55058	CODICE
16	525405
20	525406
28	525407

DIN 228	CODICE
cm 1	011115
cm 2	011120
cm 3	011125

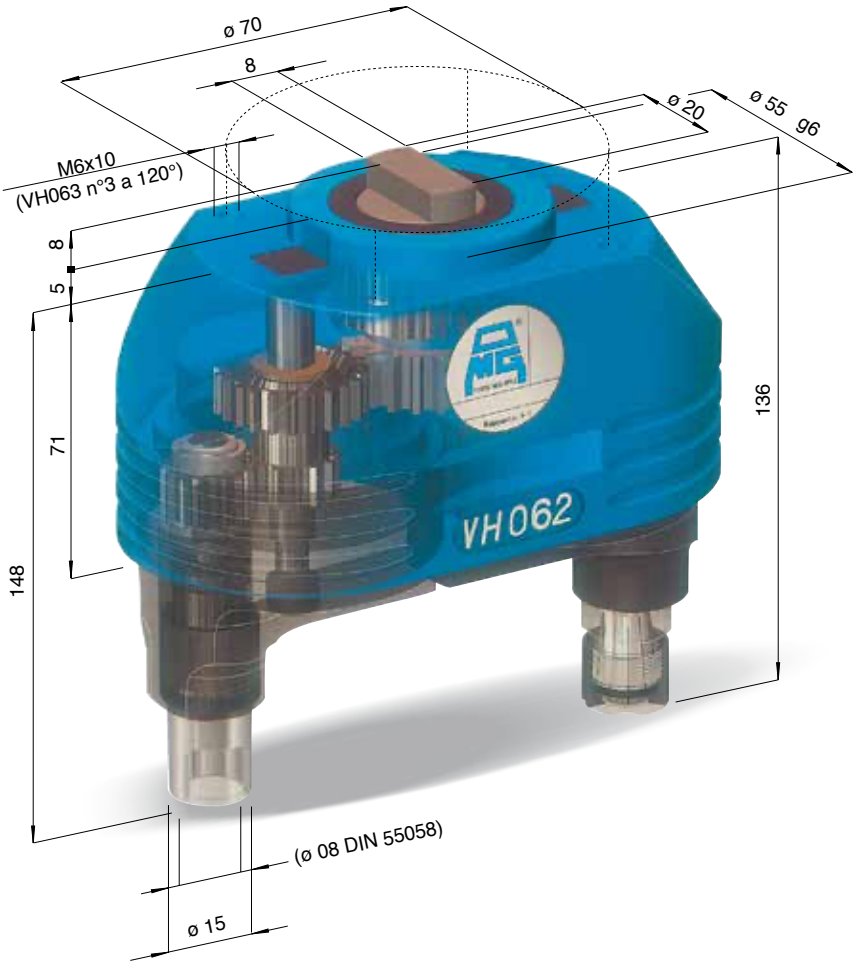
CONO ISO	CODICE
30-40	500202

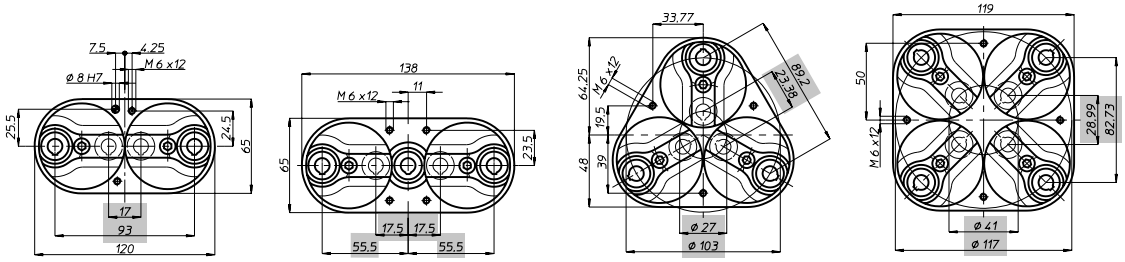


VH06

TESTE MULTIPLE AD ASSI VARIABILI • *VARIABLE AXIS HEADS*

ø7 CAPACITÀ FORATURA
DRILLING CAPACITY





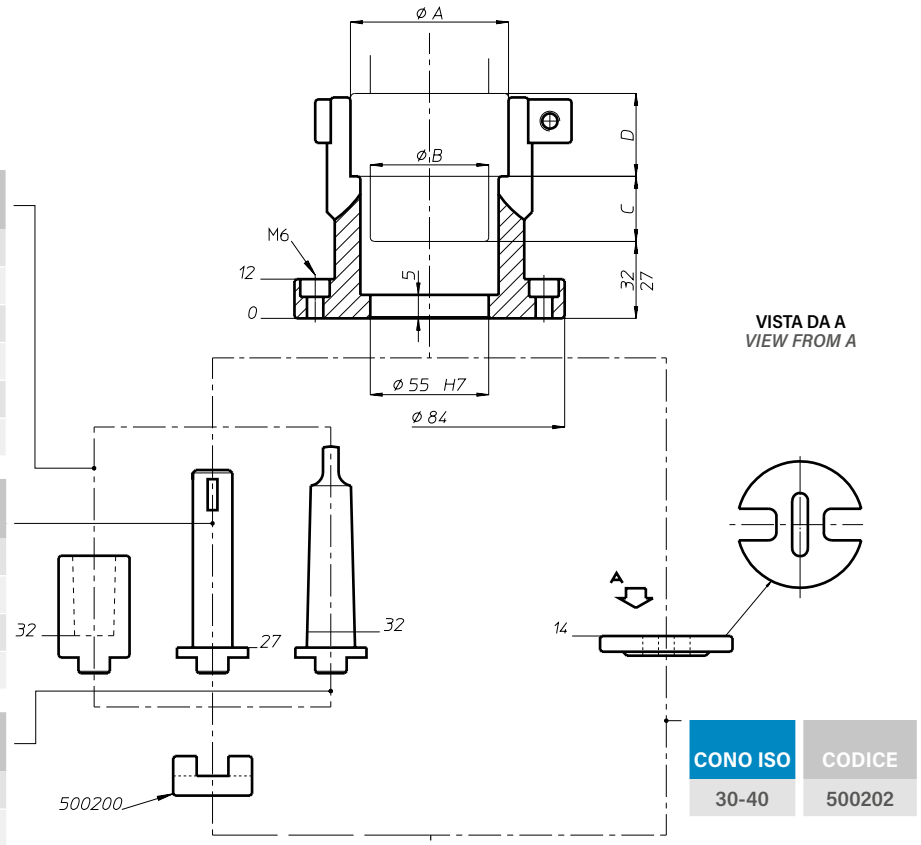
TESTA MODELLO *HEAD TYPE*	VH 062	VH 063 L	VH 063	VH 064
ARTICOLO *ITEM*	VH 062 P	VH 063 LP	VH 063 P	VH 064 P
ATTACCO UTENSILE *SPINDLE TYPE*	ER 11 - max ø 7			
ARTICOLO *ITEM*	VH 062 D	VH 063 LD	VH 063 D	VH 064 D
ATTACCO UTENSILE *SPINDLE TYPE*	DIN55058 - ø 8			
N. MANDRINI *SPINDLES NR.*	2	3	3	4
CAMPO DI LAVORO MIN. *CENTRE DISTANCES MIN.*	17	17,5 + 17,5	ø 27	ø 41
CAMPO DI LAVORO MAX. *CENTRE DISTANCES MAX.*	93	55,5 + 55,5	ø 103	ø 117
CAPACITÀ FORATURA *DRILLING CAPACITY*	**ACCIAIO**/*STILL* Rm 500 N/mm² - ø 6 | **GHISA**/*CAST IRON* GG25 - ø 7			
MASCHIATURA *TAPPING*	M 5			
RAPPORTO *RATIO*	1 - 1			
VELOCITÀ *RPM*	4.000			
PESO *WEIGHT*	1,65 kg	1,95 kg	2,3 kg	3,1 kg

NOTA: NOTE: A.B.C.D. DATI MACCHINA
A.B.C.D. MACHINE FEATURES

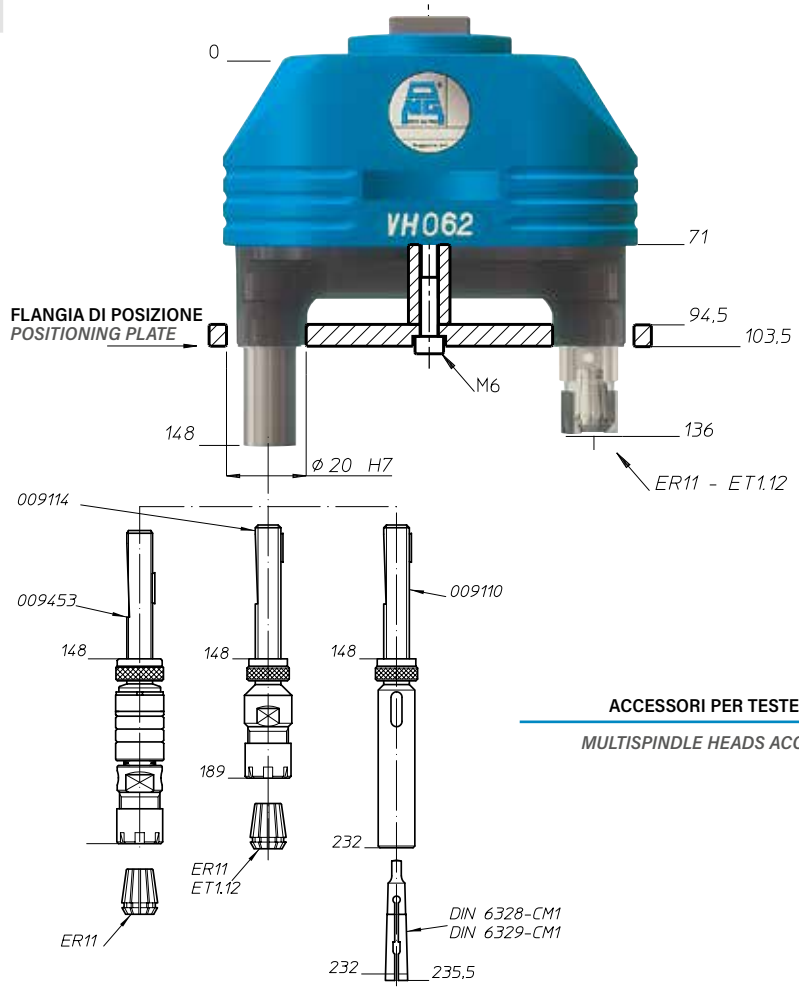
DIN 238	CODICE
B 10	011277
B 12	011278
B 16	011279
B 18	011280
B 22	011281
B 24	011282

DIN 55058	CODICE
16	525405
20	525406
28	525407
36	525408

DIN 228	CODICE
cm 1	011115
cm 2	011120
cm 3	011125
cm 4	011130
cm 5	011135



CONO ISO	CODICE
30-40	500202

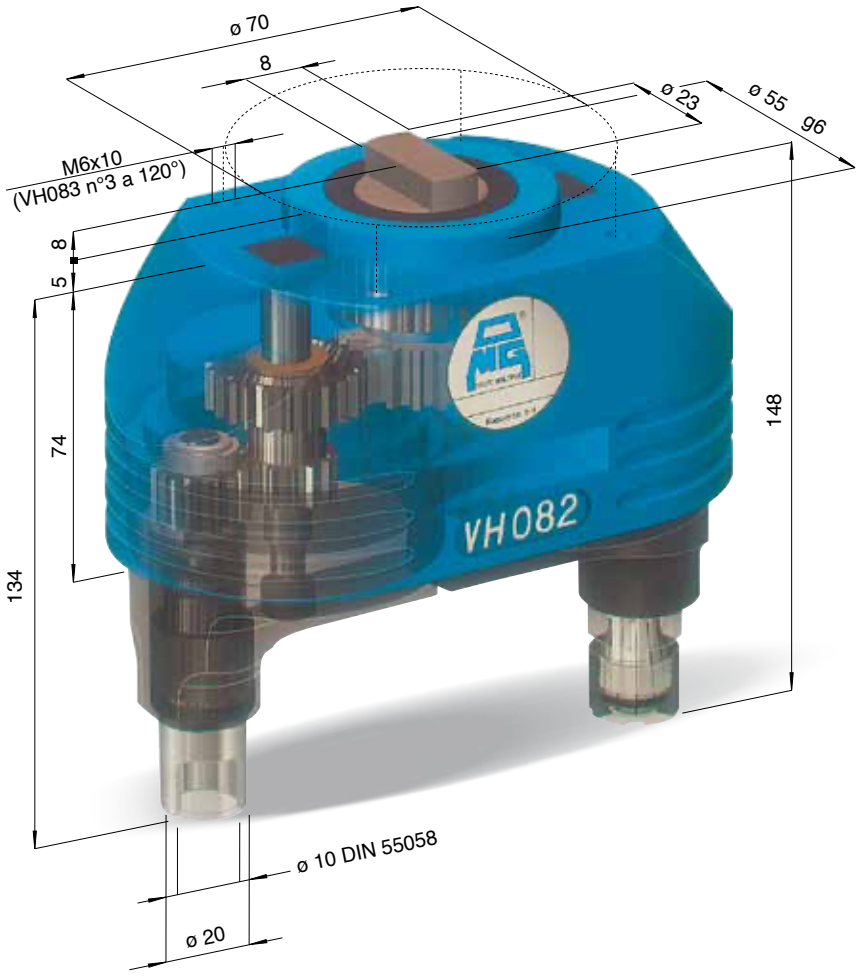


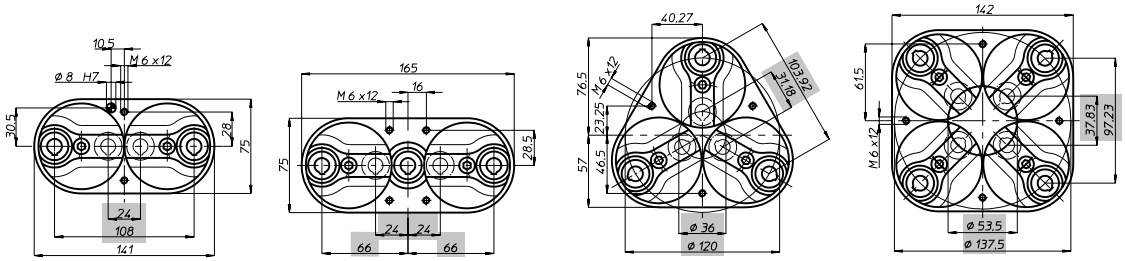
ACCESSORI PER TESTE MULTIPLE
MULTISPINDLE HEADS ACCESSORIES

VH08

TESTE MULTIPLE AD ASSI VARIABILI • *VARIABLE AXIS HEADS*

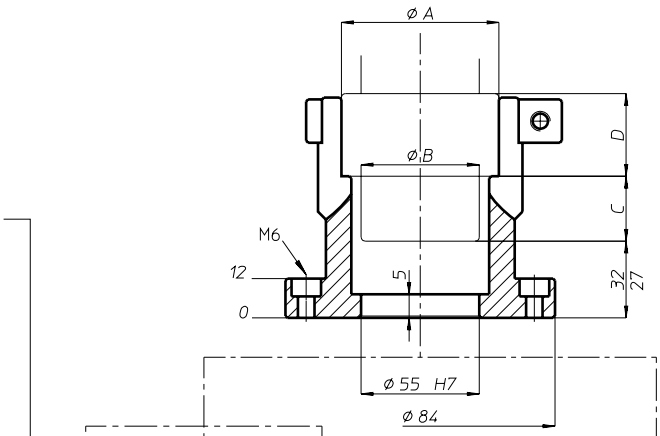
ø10 CAPACITÀ FORATURA
DRILLING CAPACITY



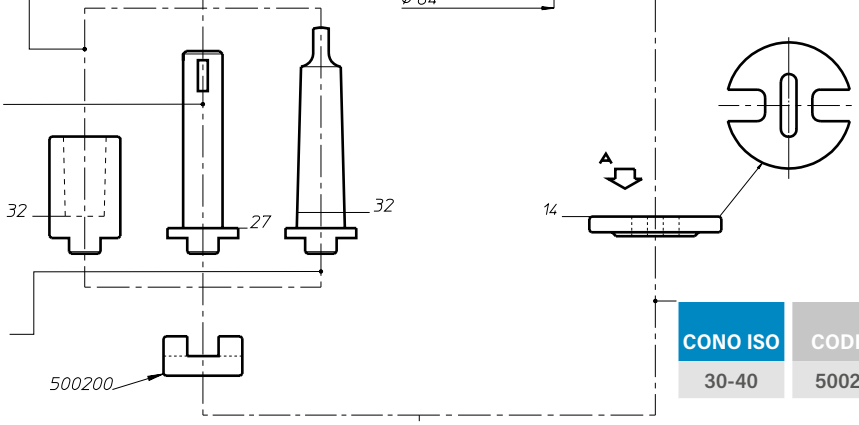


TESTA MODELLO *HEAD TYPE*	VH 082	VH 083 L	VH 083	VH 084
ARTICOLO *ITEM*	VH 082 P	VH 083 LP	VH 083 P	VH 84 P
ATTACCO UTENSILE *SPINDLE TYPE*	ER 16 - max ø 10			
ARTICOLO *ITEM*	VH 082 D	VH 083 LD	VH 083 D	VH 84 D
ATTACCO UTENSILE *SPINDLE TYPE*	DIN55058 - ø 10			
N. MANDRINI *SPINDLES NR.*	2	3	3	4
CAMPO DI LAVORO MIN. *CENTRE DISTANCES MIN.*	24	24 + 24	ø 36	ø 53,5
CAMPO DI LAVORO MAX. *CENTRE DISTANCES MAX.*	108	66 + 66	ø 120	ø 137,5
CAPACITÀ FORATURA *DRILLING CAPACITY*	**ACCIAIO**/*STILL* Rm 500 N/mm² - ø 8 | **GHISA**/*CAST IRON* GG25 - ø 10			
MASCHIATURA *TAPPING*	M 6			
RAPPORTO *RATIO*	1 - 1			
VELOCITÀ *RPM*	4.000			
PESO *WEIGHT*	2,2 kg	2,9 kg	3,4 kg	4,6 kg

NOTA: NOTE: A.B.C.D. DATI MACCHINA
A.B.C.D. MACHINE FEATURES



VISTA DA A
VIEW FROM A

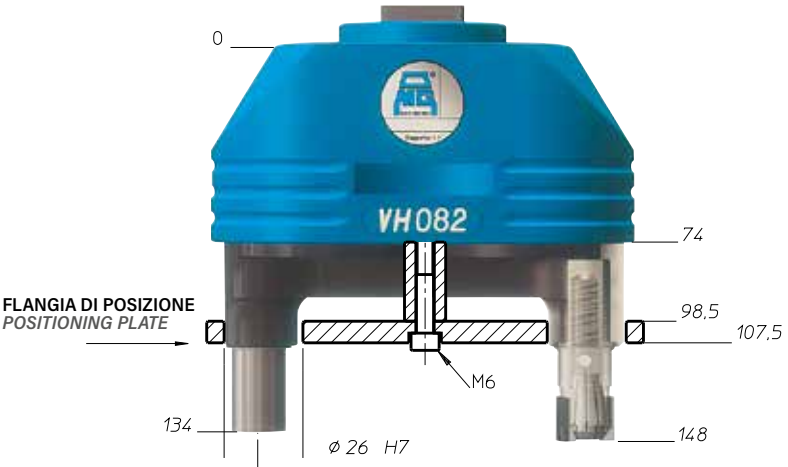


DIN 238	CODICE
B 10	011277
B 12	011278
B 16	011279
B 18	011280
B 22	011281
B 24	011282

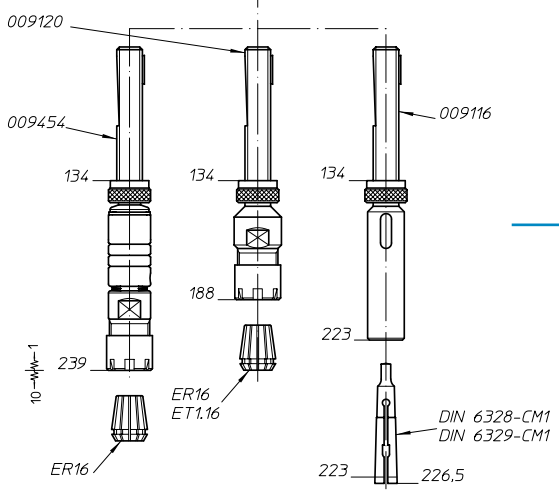
DIN 55058	CODICE
16	525405
20	525406
28	525407
36	525408

DIN 228	CODICE
cm 1	011115
cm 2	011120
cm 3	011125
cm 4	011130
cm 5	011135

CONO ISO	CODICE
30-40	500202



FLANGIA DI POSIZIONE
POSITIONING PLATE

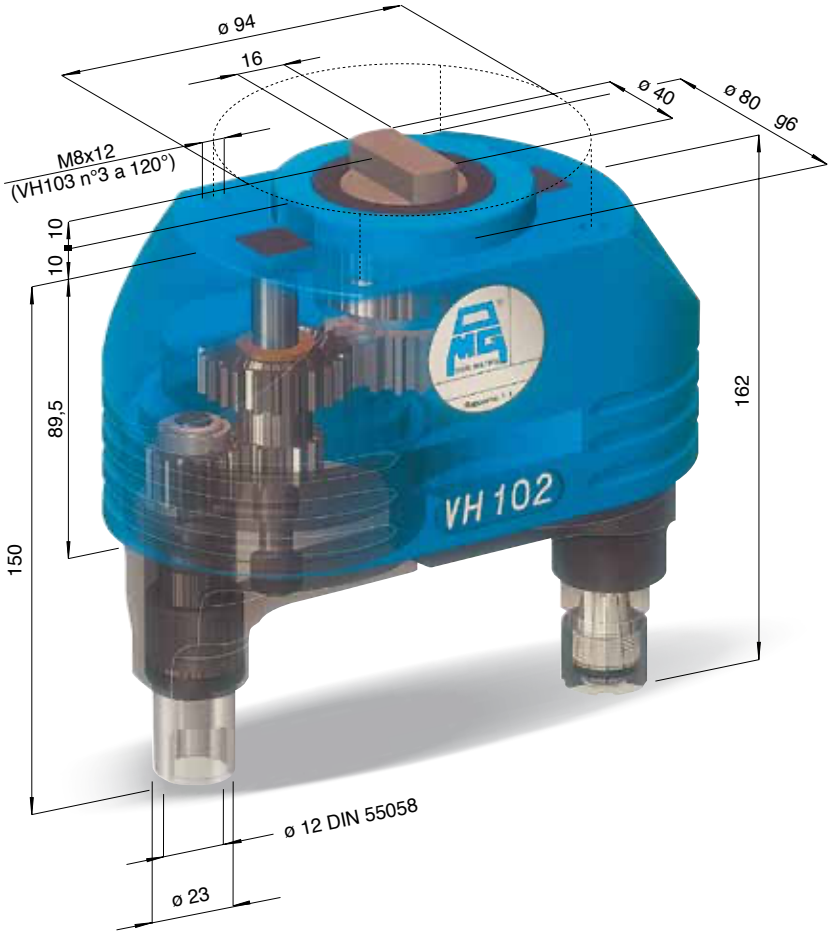


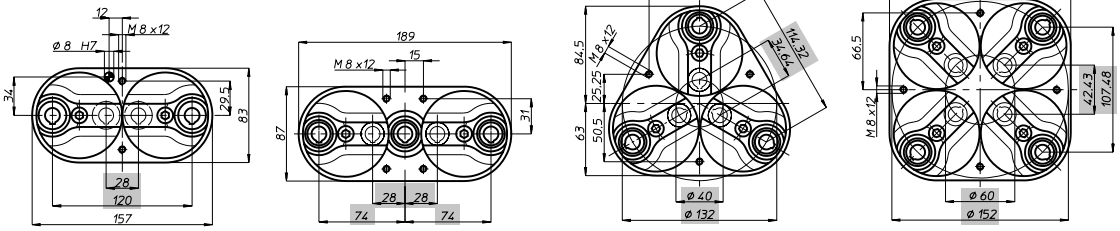
ACCESSORI PER TESTE MULTIPLE
MULTISPINDLE HEADS ACCESSORIES

VH10

TESTE MULTIPLE AD ASSI VARIABILI • *VARIABLE AXIS HEADS*

ø12 CAPACITÀ FORATURA
DRILLING CAPACITY





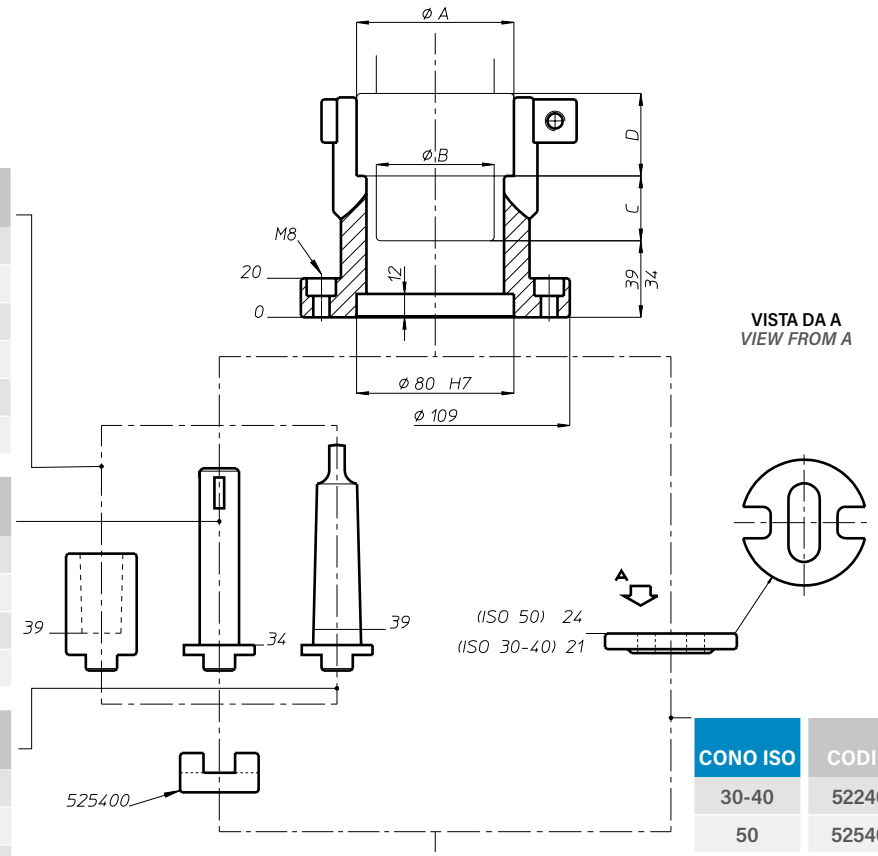
TESTA MODELLO *HEAD TYPE*	VH 102	VH 103 L	VH 103	VH 104
ARTICOLO *ITEM*	VH 102 P	VH 103 LP	VH 103 P	VH 104 P
ATTACCO UTENSILE *SPINDLE TYPE*	ER 16 - max ø 10			
ARTICOLO *ITEM*	VH 102 D	VH 103 LD	VH 103 D	VH 104 D
ATTACCO UTENSILE *SPINDLE TYPE*	DIN55058 - ø 12			
N. MANDRINI *SPINDLES NR.*	2	3	3	4
CAMPO DI LAVORO MIN. *CENTRE DISTANCES MIN.*	28	28 + 28	ø 40	ø 60
CAMPO DI LAVORO MAX. *CENTRE DISTANCES MAX.*	120	74 + 74	ø 132	ø 152
CAPACITÀ FORATURA *DRILLING CAPACITY*	**ACCIAIO**/*STILL* Rm 500 N/mm² - ø 10 | **GHISA**/*CAST IRON* GG25 - ø 12			
MASCHIATURA *TAPPING*	M 8			
RAPPORTO *RATIO*	1 - 1			
VELOCITÀ *RPM*	3.500			
PESO *WEIGHT*	3,5 kg	4,9 kg	4,9 kg	7,2 kg

NOTA: NOTE: A.B.C.D. DATI MACCHINA / *A.B.C.D. MACHINE FEATURES*

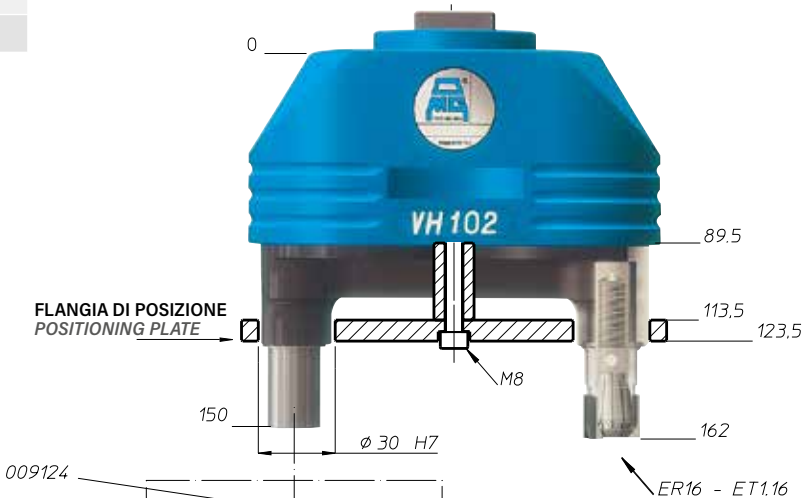
DIN 238	CODICE
B 10	011277
B 12	011278
B 16	011279
B 18	011280
B 22	011281
B 24	011282

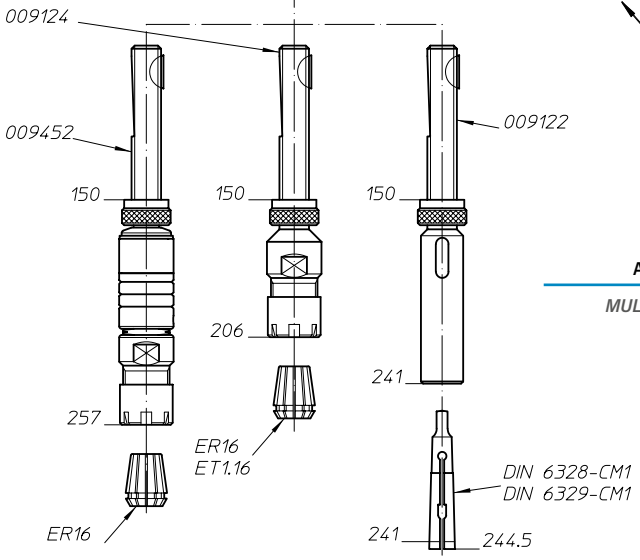
DIN 55058	CODICE
16	525405
20	525406
28	525407
36	525408

DIN 228	CODICE
cm 1	011115
cm 2	011120
cm 3	011125
cm 4	011130
cm 5	011135



CONO ISO	CODICE
30-40	522402
50	525403





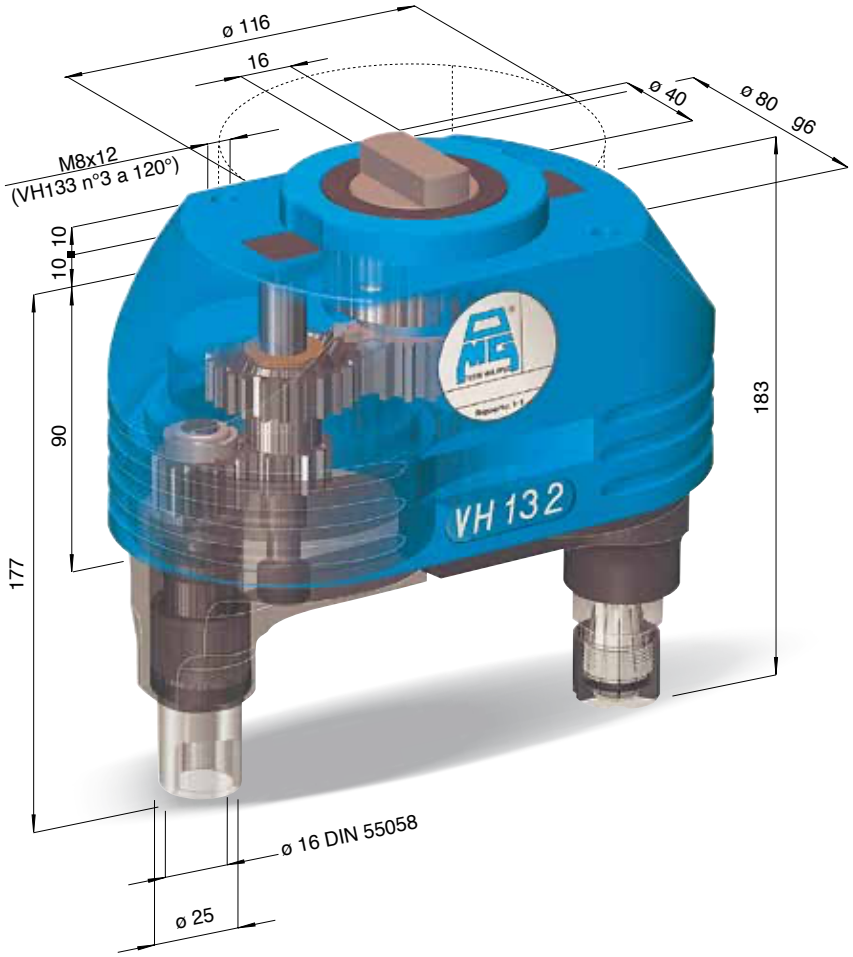
ACCESSORI PER TESTE MULTIPLE

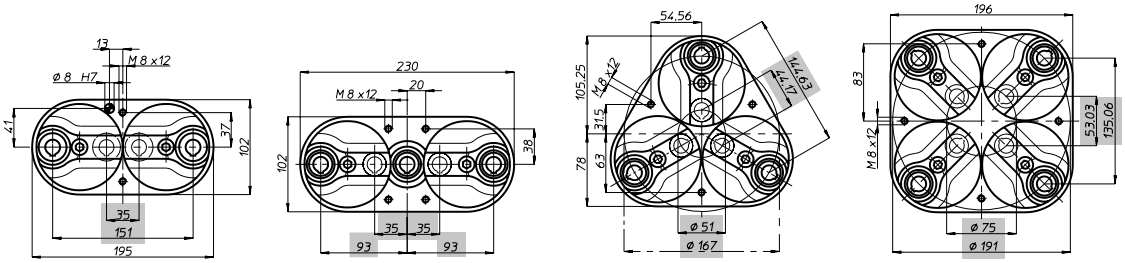
MULTISPINDLE HEADS ACCESSORIES

VH13

TESTE MULTIPLE AD ASSI VARIABILI • *VARIABLE AXIS HEADS*

ø14 CAPACITÀ FORATURA
DRILLING CAPACITY





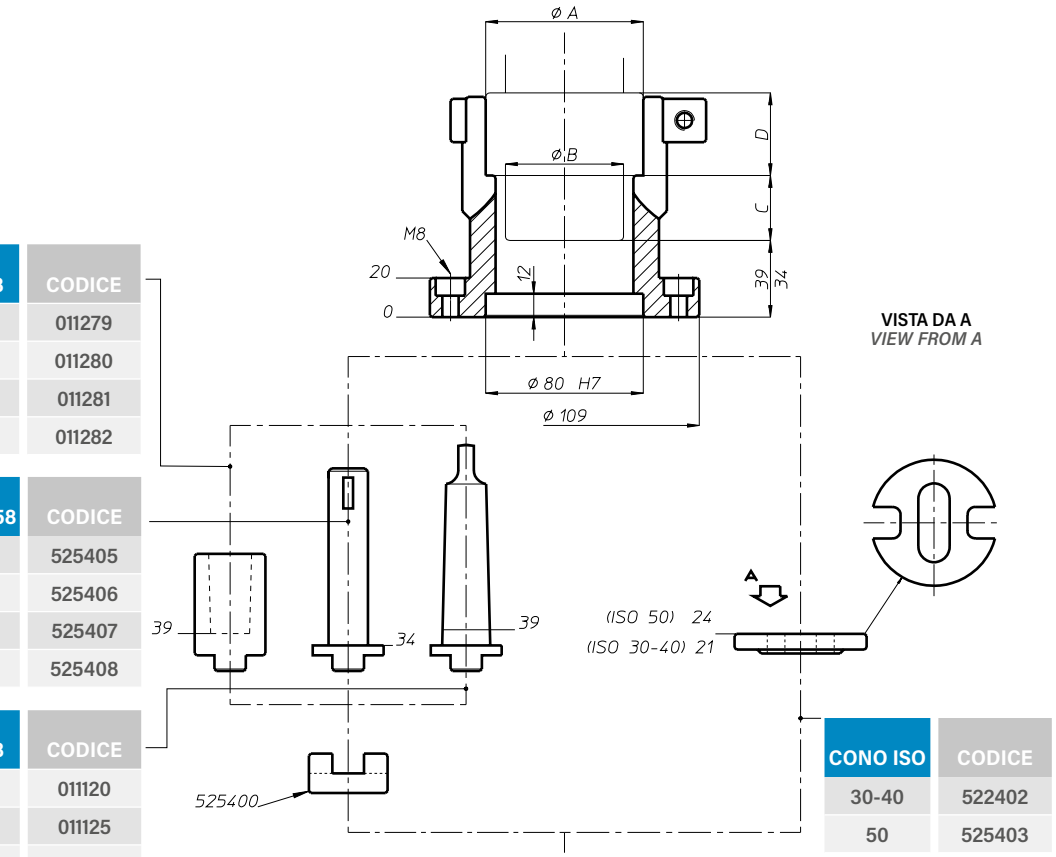
TESTA MODELLO *HEAD TYPE*	VH 132	VH 133 L	VH 133	VH 134
ARTICOLO *ITEM*	VH 132 P	VH 133 LP	VH 133 P	VH 134 P
ATTACCO UTENSILE *SPINDLE TYPE*	ER 20 - max ø 13			
ARTICOLO *ITEM*	VH 132 D	VH 133 LD	VH 133 D	VH 134 D
ATTACCO UTENSILE *SPINDLE TYPE*	DIN55058 - ø 16			
N. MANDRINI *SPINDLES NR.*	2	3	3	4
CAMPO DI LAVORO MIN. *CENTRE DISTANCES MIN.*	35	35 + 35	ø 51	ø 75
CAMPO DI LAVORO MAX. *CENTRE DISTANCES MAX.*	151	93 + 93	ø 167	ø 191
CAPACITÀ FORATURA *DRILLING CAPACITY*	**ACCIAIO**/*STILL* Rm 500 N/mm² - ø 13 | **GHISA**/*CAST IRON* GG25 - ø 14			
MASCHIATURA *TAPPING*	M 12			
RAPPORTO *RATIO*	1 - 1			
VELOCITÀ *RPM*	3.000			
PESO *WEIGHT*	5,3 kg	7,2 kg	7 kg	10,8 kg

NOTA: / NOTE: A.B.C.D. DATI MACCHINA / *A.B.C.D. MACHINE FEATURES*

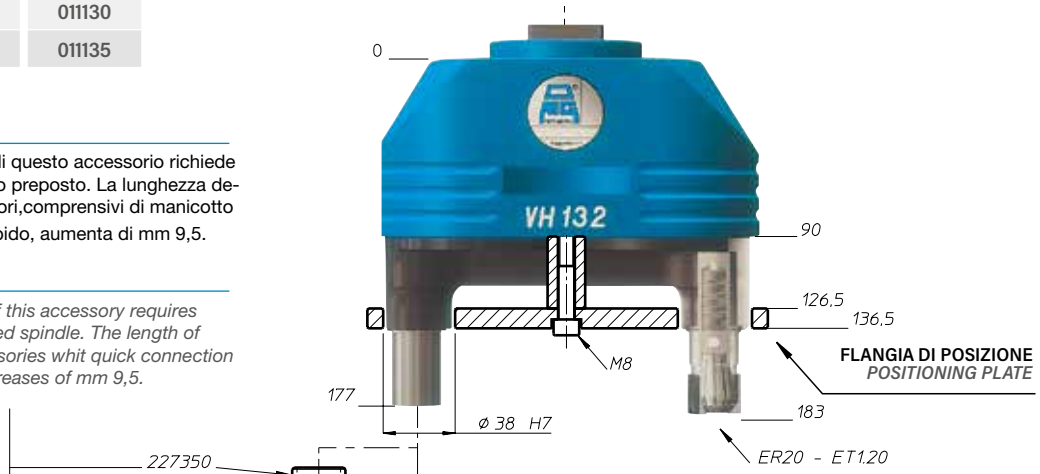
DIN 238	CODICE
B 16	011279
B 18	011280
B 22	011281
B 24	011282

DIN 55058	CODICE
16	525405
20	525406
28	525407
36	525408

DIN 228	CODICE
cm 2	011120
cm 3	011125
cm 4	011130
cm 5	011135



CONO ISO	CODICE
30-40	522402
50	525403

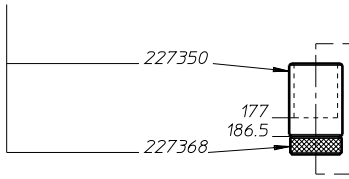


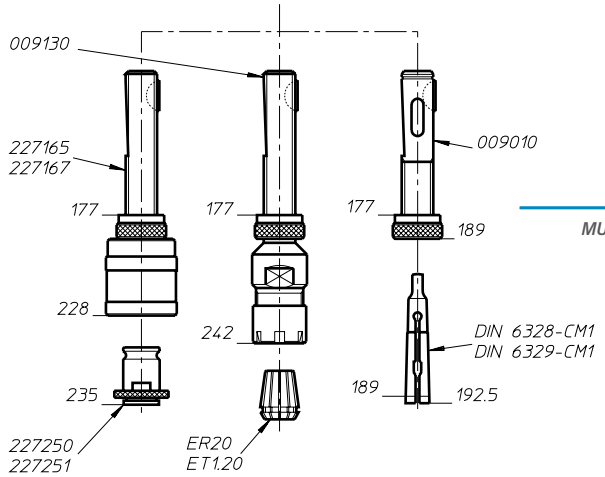
Nota:

L'utilizzo di questo accessorio richiede il mandrino preposto. La lunghezza degli accessori,comprensivi di manicotto attaccorapido, aumenta di mm 9,5.

Note:

The use of this accessory requires prearranged spindle. The length of this accessories whit quick connection sleeve increases of mm 9,5.





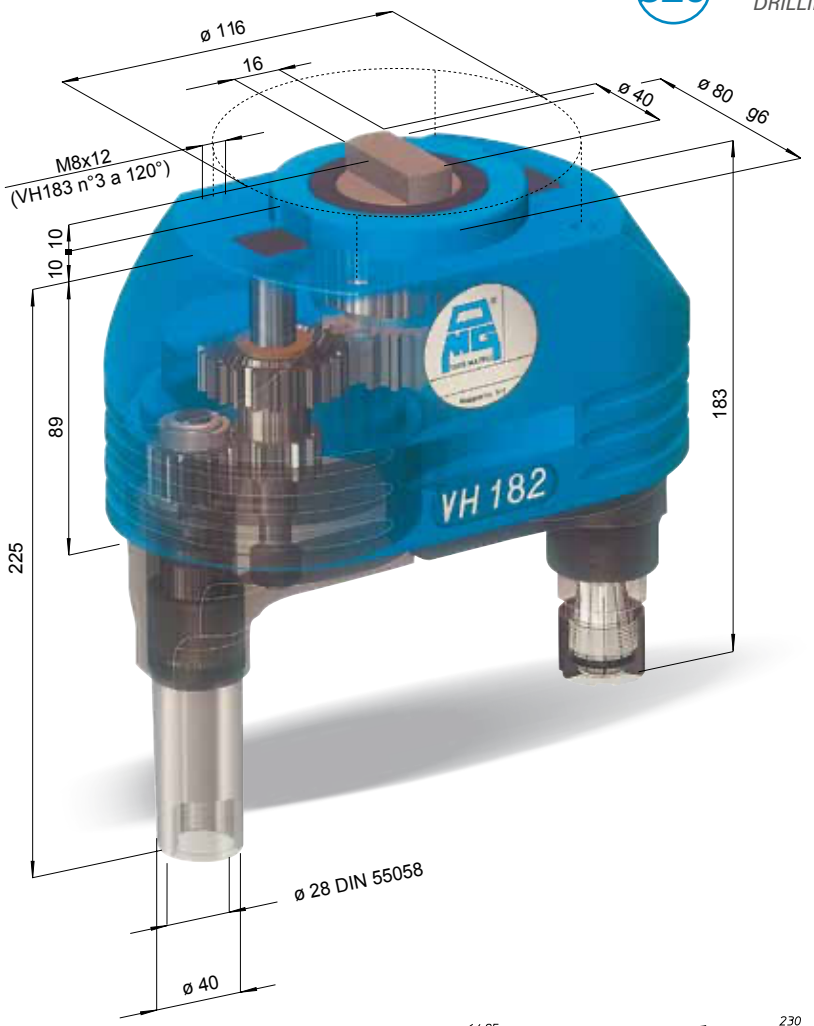
ACCESSORI PER TESTE MULTIPLE

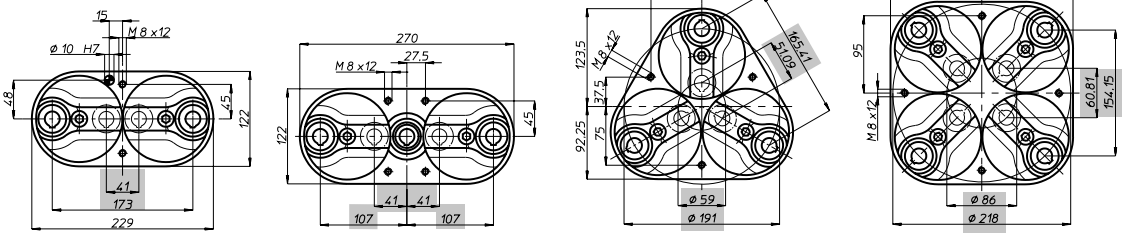
MULTISPINDLE HEADS ACCESSORIES

VH18

TESTE MULTIPLE AD ASSI VARIABILI • *VARIABLE AXIS HEADS*

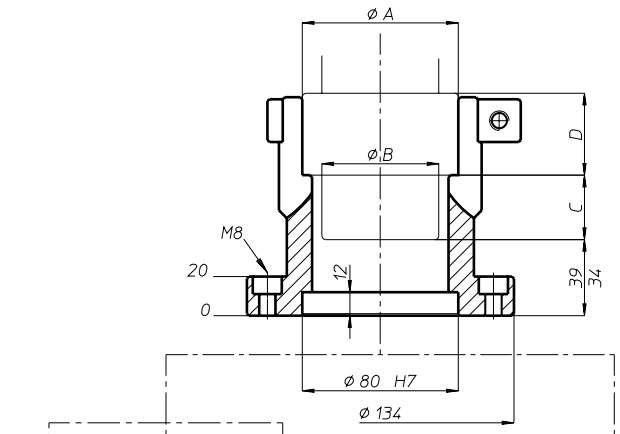
ø20 CAPACITÀ FORATURA
DRILLING CAPACITY



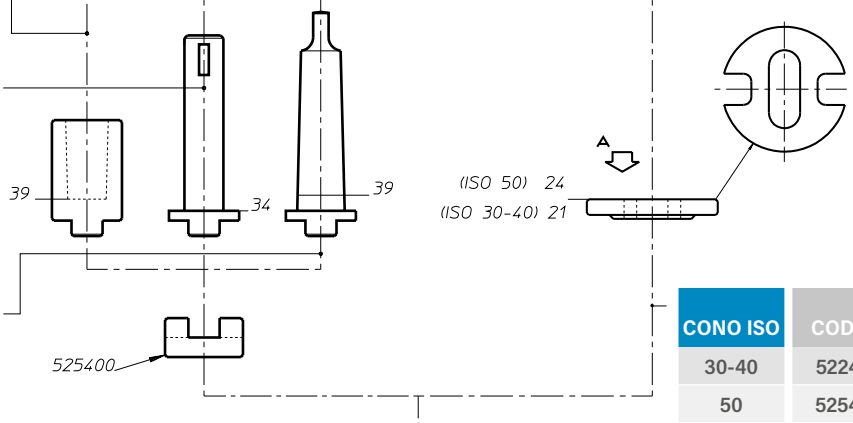


TESTA MODELLO *HEAD TYPE*	VH 182	VH 183 L	VH 183	VH 184
ARTICOLO *ITEM*	VH 182 P	VH 183 LP	VH 183 P	VH 184 P
ATTACCO UTENSILE *SPINDLE TYPE*	ER 25 - max ø 16			
ARTICOLO *ITEM*	VH 182 D	VH 183 LD	VH 183 D	VH 184 D
ATTACCO UTENSILE *SPINDLE TYPE*	DIN55058 - ø 28			
N. MANDRINI *SPINDLES NR.*	2	3	3	4
CAMPO DI LAVORO MIN. *CENTRE DISTANCES MIN.*	41	41 + 41	ø 59	ø 86
CAMPO DI LAVORO MAX. *CENTRE DISTANCES MAX.*	173	107 + 107	ø 191	ø 218
CAPACITÀ FORATURA *DRILLING CAPACITY*	**ACCIAIO**/*STILL* Rm 500 N/mm² - ø 18 | **GHISA**/*CAST IRON* GG25 - ø 20			
MASCHIATURA *TAPPING*	M 14			
RAPPORTO *RATIO*	1 - 1			
VELOCITÀ *RPM*	2.500			
PESO *WEIGHT*	8,3 kg	10,75 kg	12 kg	15,75 kg

NOTA: / NOTE: A.B.C.D. DATI MACCHINA / *A.B.C.D. MACHINE FEATURES*



VISTA DA A
VIEW FROM A

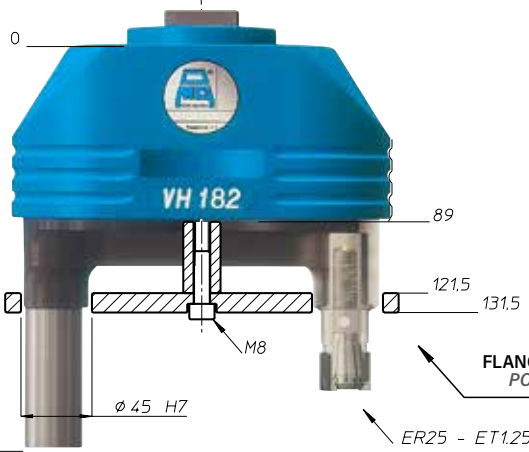


DIN 238	CODICE
B 16	011279
B 18	011280
B 22	011281
B 24	011282

DIN 55058	CODICE
16	525405
20	525406
28	525407
36	525408

DIN 228	CODICE
cm 3	011125
cm 4	011130
cm 5	011135

CONO ISO	CODICE
30-40	522402
50	525403



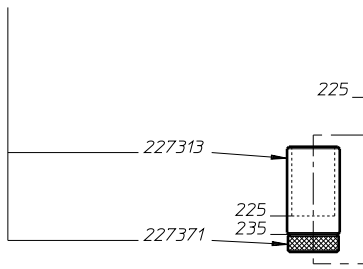
FLANGIA DI POSIZIONE
POSITIONING PLATE

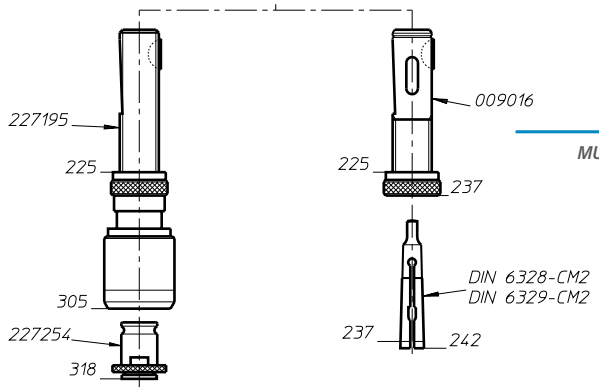
Nota:

La lunghezza degli accessori, comprensivi di manicotto attacco rapido, aumenta di mm 10.

Note:

The length of this accessories whit quick connection sleeve increases of mm 10.



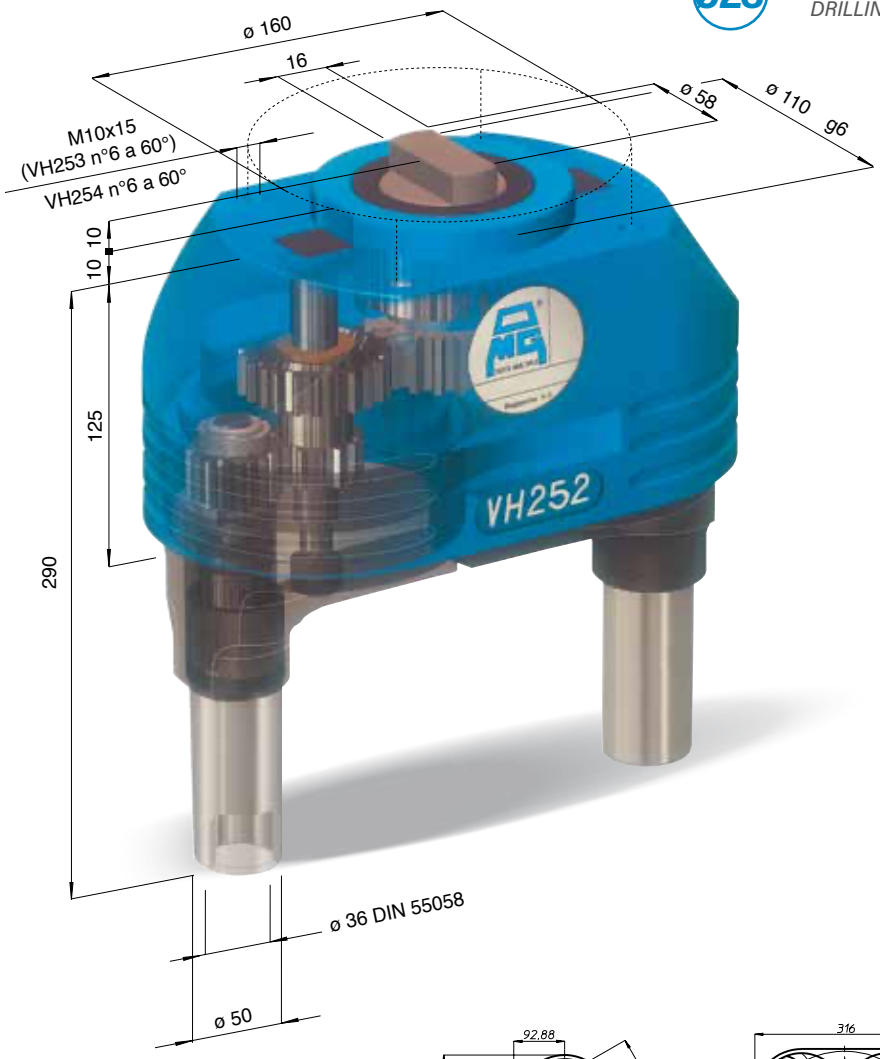


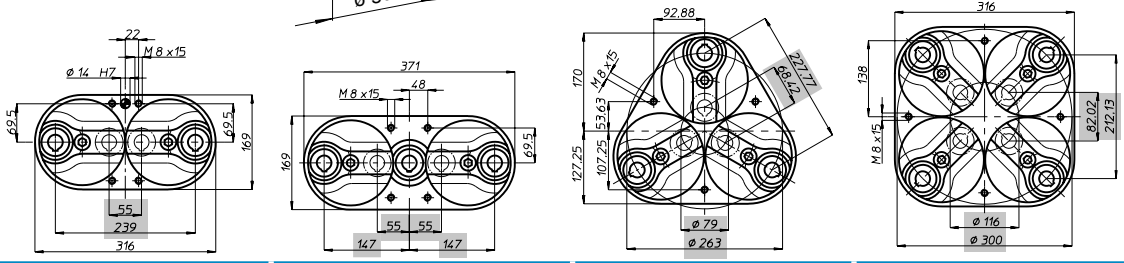
ACCESSORI PER TESTE MULTIPLE
MULTISPINDLE HEADS ACCESSORIES

VH25

TESTE MULTIPLE AD ASSI VARIABILI • *VARIABLE AXIS HEADS*

ø28 CAPACITÀ FORATURA
DRILLING CAPACITY





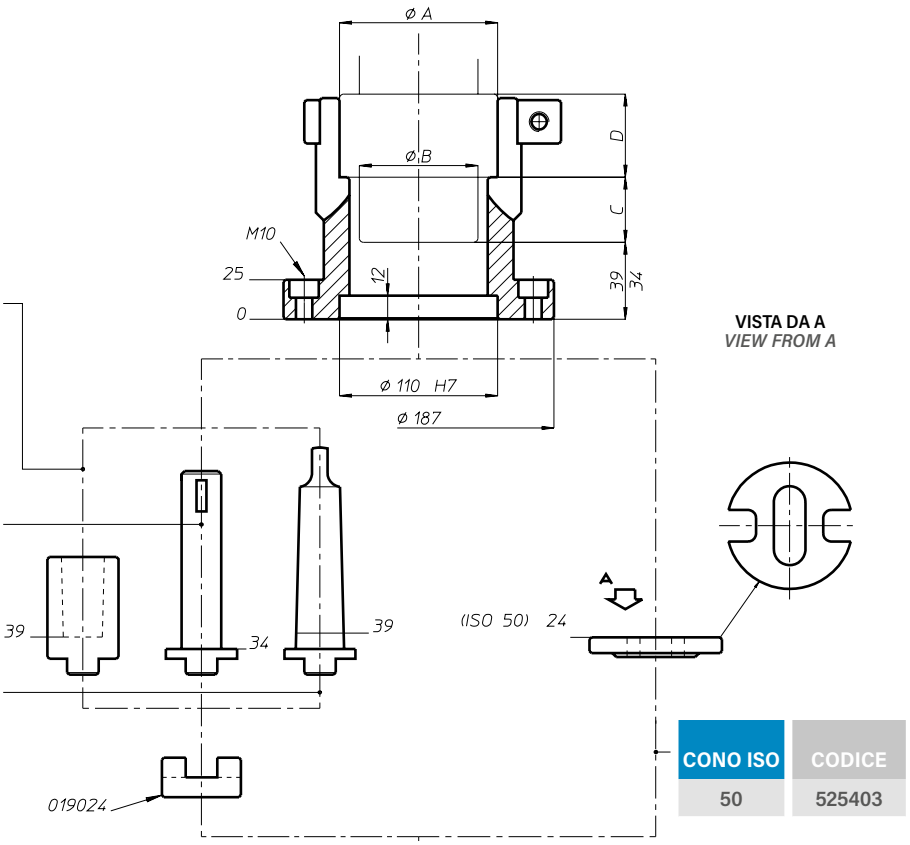
TESTA MODELLO *HEAD TYPE*	VH 252	VH 253 L	VH 253	VH 254
ARTICOLO *ITEM*				
ATTACCO UTENSILE *SPINDLE TYPE*				
ARTICOLO *ITEM*	VH 252 D	VH 253 LD	VH 253 D	VH 254 D
ATTACCO UTENSILE *SPINDLE TYPE*	DIN55058 - ø 36			
N. MANDRINI *SPINDLES NR.*	2	3	3	4
CAMPO DI LAVORO MIN. *CENTRE DISTANCES MIN.*	55	55 + 55	ø 79	ø 116
CAMPO DI LAVORO MAX. *CENTRE DISTANCES MAX.*	239	147 + 147	ø 263	ø 300
CAPACITÀ FORATURA *DRILLING CAPACITY*	**ACCIAIO**/*STILL* Rm 500 N/mm² - ø 25 | **GHISA**/*CAST IRON* GG25 - ø 28			
MASCHIATURA *TAPPING*	M 20			
RAPPORTO *RATIO*	1 - 1			
VELOCITÀ *RPM*	2.000			
PESO *WEIGHT*	27 kg	32 kg	39 kg	52 kg

NOTA: / NOTE: A.B.C.D. DATI MACCHINA / *A.B.C.D. MACHINE FEATURES*

DIN 238	CODICE
B 18	011280
B 22	011281
B 24	011282

DIN 55058	CODICE
16	525405
20	525406
28	525407
36	525408

DIN 228	CODICE
cm 3	011125
cm 4	011130
cm 5	011135



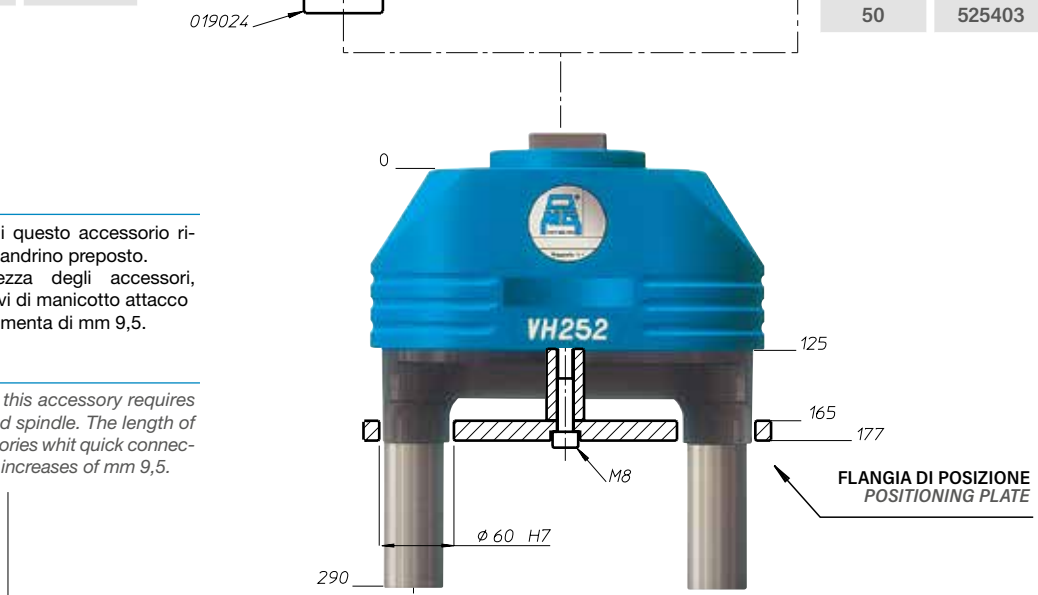
CONO ISO	CODICE
50	525403

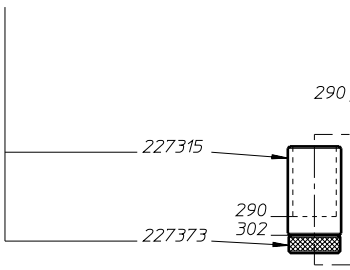
Nota:

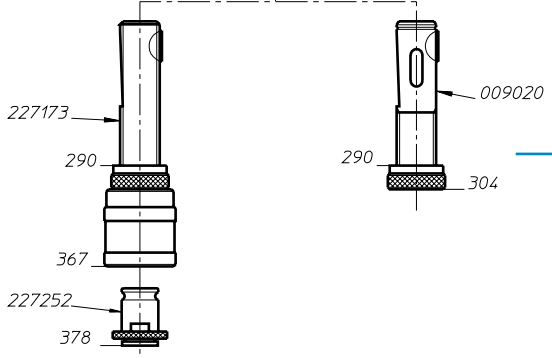
L'utilizzo di questo accessorio richiede il mandrino preposto.
La lunghezza degli accessori, comprensivi di manicotto attacco Rapido, aumenta di mm 9,5.

Note:

The use of this accessory requires prearranged spindle. The length of this accessories whit quick connection sleeve increases of mm 9,5.







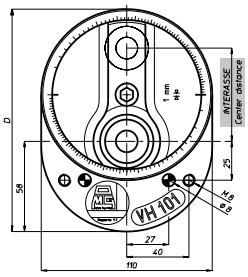
ACCESSORI PER TESTE MULTIPLE
MULTISPINDLE HEADS ACCESSORIES

VH101

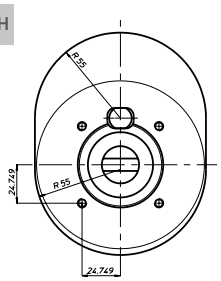
TESTE MULTIPLE AD ASSI VARIABILI • *VARIABLE AXIS HEADS*

ø12 CAPACITÀ FORATURA
DRILLING CAPACITY

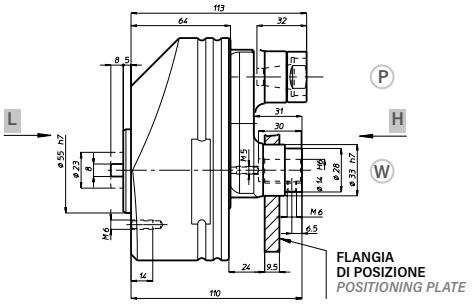




VISTA *VIEW* H



VISTA *VIEW* L



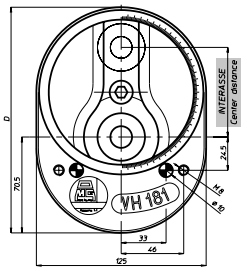
TESTA MODELLO *HEAD TYPE*	**VH 101**
ARTICOLO *ITEM*	VH 101 P
ATTACCO UTENSILE *SPINDLE TYPE*	ER 16 - max ø 10
ARTICOLO *ITEM*	VH 101W14
ATTACCO UTENSILE *SPINDLE TYPE*	ø 14
N. MANDRINI *SPINDLES NR.*	1
CAMPO DI LAVORO MIN. *CENTRE DISTANCES MIN.*	0
CAMPO DI LAVORO MAX. *CENTRE DISTANCES MAX.*	60
D	143
CAPACITÀ FORATURA *DRILLING CAPACITY*	**ACCIAIO**/*STILL* Rm 500 N/mm² - ø 10 | **GHISA**/*CAST IRON* GG25 - ø 12
MASCHIATURA *TAPPING*	M 10
RAPPORTO *RATIO*	1 - 1
VELOCITÀ *RPM*	3.000
PESO *WEIGHT*	2,8 kg

VH181

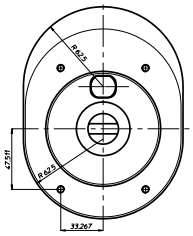
TESTE MULTIPLE AD ASSI VARIABILI • *VARIABLE AXIS HEADS*

ø20 CAPACITÀ FORATURA
DRILLING CAPACITY

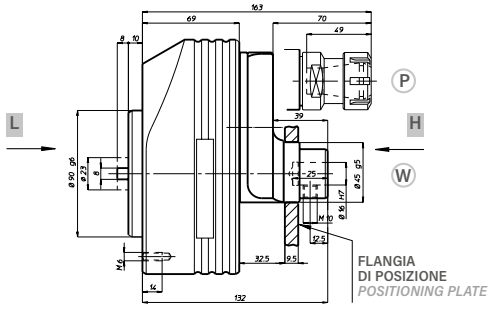




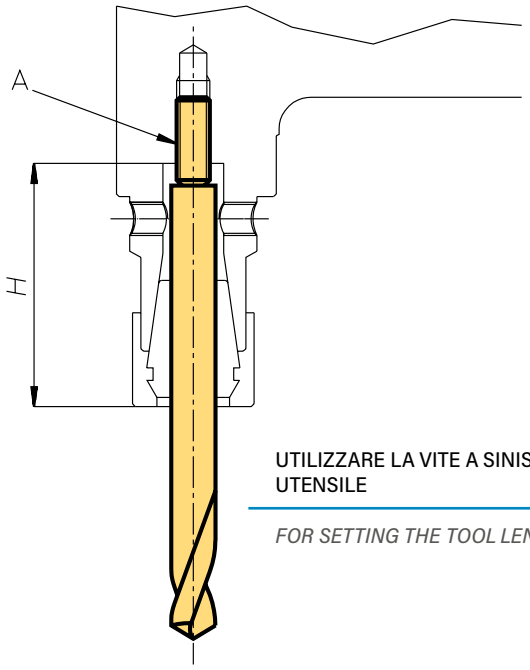
VISTA *VIEW* H



VISTA *VIEW* L



TESTA MODELLO *HEAD TYPE*	VH 181	VH 181-122
ARTICOLO *ITEM*	VH 181 P	VH 181-122-P
ATTACCO UTENSILE *SPINDLE TYPE*	ER 25 - max ø 16	
ARTICOLO *ITEM*	VH 181 W16	VH 181-122-W 16
ATTACCO UTENSILE *SPINDLE TYPE*	ø 16	
N. MANDRINI *SPINDLES NR.*	1	1
CAMPO DI LAVORO MIN.	0	56
CENTRE DISTANCES MAX	66	122
D	166	122
CAPACITÀ FORATURA *DRILLING CAPACITY*	**ACCIAIO**/*STILL* Rm 500 N/mm² - ø 18 | **GHISA**/*CAST IRON* GG25 - ø 20	
MASCHIATURA *TAPPING*	M 14	
RAPPORTO *RATIO*	1 - 1	
VELOCITÀ *RPM*	2.500	
PESO *WEIGHT*	4,1 kg	6,4 kg



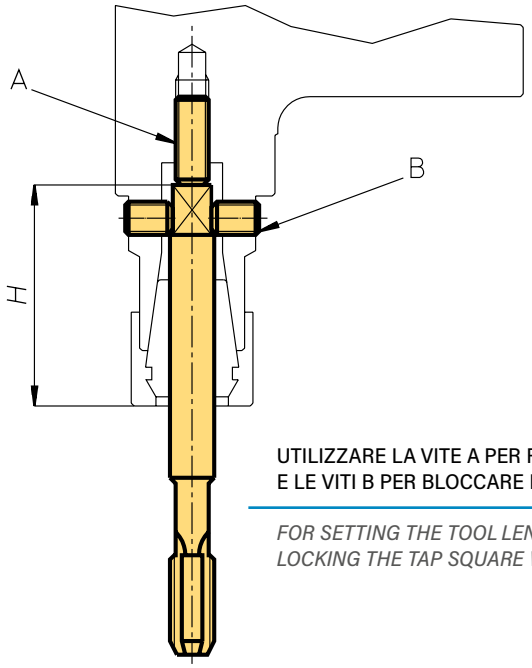
FORATURA CON PINZE ER
DRILLING WITH ER COLLETS

UTILIZZARE LA VITE A SINISTRA PER REGISTRARE L'ALTEZZA UTENSILE

FOR SETTING THE TOOL LENGHT, USE THE LEFT SCREW A

TESTA MODELLO *HEAD TYPE*	VH 04	VH 06	VH 08	VH 10	VH 13	VH 18
H MAX	23	27	44	44	52	49

NOTA: nella testa VH04 e VH06 la vite A non è presente ***NOTE:*** *in the head VH04 and VH06 there isn't the screw A*



MASCHIATURA CON PINZE ER
TAPPING WITH ER COLLETS

UTILIZZARE LA VITE A PER REGISTRARE L'ALTEZZA UTENSILE E LE VITI B PER BLOCCARE IL QUADRO DEL MASCHIO

FOR SETTING THE TOOL LENGHT, USE THE SCREW A; LOCKING THE TAP SQUARE WITH THE SCREWS B

TESTA MODELLO *HEAD TYPE*	VH 04	VH 06	VH 08	VH 10	VH 13	VH 18
H MAX	23	27	38	38	44	49

NOTA: nella testa VH04 e VH06 la vite A non è presente ***NOTE:*** *in the head VH04 and VH06 there isn't the screw A*

VH 042 LP	n° 2 mandrini a pinza, min. 24 max. 84	2 spindles for spring collets min. 24 max. 84
VH 042P R. 1-2	n° 2 mandrini a pinza, min. 12 max. 72 rapp. 1-2	2 spindles for spring collets min. 12 max. 72 ratio 1-2
VH 062 LP	n° 2 mandrini a pinza, min. 35 max. 111	2 spindles for spring collets min. 35 max. 111
VH 062 LD	n° 2 mandrini DIN 55058-8 min. 35 max. 111	2 spindles DIN 55058-8 min. 35 max. 111
VH 062/1	n° 1 mandrino a pinza, min. 8,5 max. 46,5	1 spindle for spring collets min. 8,5 max. 46,5
VH 062P R.1-2	n° 2 mandrini a pinza min. 17 max. 93 rapp. 1-2, 067	2 spindles for spring collets min. 17 max. 93 ratio 1-2,067
VH 062P CNC40	n° 2 mandrini a pinza min. 17 max. 93 completa di cono ISO 40	2 spindles for spring collets min. 17 max. 93 with shank ISO 40
VH 063P CNC40	n° 3 mandrini a 120° a pinza min. 27 max. 103 completa di cono ISO 40	3 spindles at 120° for spring collets min. 27 max. 103 with shank ISO 40
VH 064P CNC40	n° 4 mandrini a 90° a pinza min. 41 max. 117 completa di cono ISO 40	4 spindles at 90° for spring collets min. 41 max. 117 with shank ISO 40
VH 064/3P	n° 3 mandrini a pinza min. 41 max. 117	3 spindles for spring collets min. 41 max. 117
VH 081 P	n° 1 mandrino a pinza min. 0 max. 42	1 spindle for spring collets min. 0 max. 42
VH 082 LP	n° 2 mandrini a pinza min. 48 max. 132	2 spindles for spring collets min. 48 max. 132
VH 082 LD	n° 2 mandrini DIN 55058 - 10 min. 48 max. 132	2 spindles DIN 55058 - 10 min. 48 max. 132
VH 082 P R. 1-2	n° 2 mandrini a pinza min. 24 max. 108 rapp. 1-2,067	2 spindles for spring collets min. 24 max. 108 ratio 1-2
VH 082P CNC 40	n° 2 mandrini a pinza min. 24 max. 108 completa di cono ISO 40	2 spindles for spring collets min. 24 max. 108 with shank ISO 40
VH 082PFM	n° 2 mandrini a pinza min. 24 max. 108 fora/maschia	2 spindles for spring collets min. 24 max. 108 drilling and tapping
VH 083 LP CNC40	n° 3 mandrini in linea a pinza min. 24+24 max. 66+66 completa di cono ISO 40	3 spindles on line for spring collets min. 24+24 max. 66+66 with shank ISO 40
VH 084P CNC 40	n° 4 mandrini a pinza min. 53,5 max. 137,5 completa di cono ISO 40	4 spindles for spring collets min. 53,5 max. 137,5 with shank ISO 40
VH 084/3P	n° 3 mandrini a pinza min. 53,5 max. 137,5	3 spindles for spring collets min. 53,5 max. 137,5
VH 102 LP	n° 2 mandrini a pinza min. 56 max. 148	2 spindles for spring collets min. 56 max. 148
VH 102 LD	n° 2 mandrini DIN 55058-12 min. 56 max. 148	2 spindles DIN 55058-12 min. 56 max. 148
VH 102 P CNC 40	n° 2 mandrini a pinza min. 28 max. 120 completa di cono ISO 40	2 spindles for spring collets min. 28 max. 120 with shank ISO 40
VH 102P R. 1-2	n° 2 mandrini a pinza min. 28 max. 120 rapporto 1-2	2 spindles for spring collets min. 28 max. 120 ratio 1-2
VH 102 PFM	n° 2 mandrini a pinza min. 28 max. 120 fora/maschia	2 spindles for spring collets min. 28 max. 120 drilling and tapping
VH 102-220 P	n° 2 mandrini a pinza min. 128 max. 220	2 spindles for spring collets min. 128 max. 220
VH 102-300 P	n° 2 mandrini a pinza min. 208 max. 300	2 spindles for spring collets min. 208 max. 300
VH 104D R.1-2	n° 4 mandrini a 90° DIN 55058-12 min. 60 max. 152 rapp. 1-2	4 spindles at 90° DIN 55058-12 min. 60 max. 152 ratio 1-2
VH 104P CNC50	n° 4 mandrini a 90° a pinza min. 60 max. 152 completa di cono ISO 50	4 spindles at 90° for spring collets min. 60 max. 152 with shank ISO 50
VH 132 LP	n° 2 mandrini a pinza min. 70 max. 186	2 spindles for spring collets min. 70 max. 186
VH 132 LD	n° 2 mandrini DIN 55058-16 min. 70 max. 186	2 spindles DIN55058-16 min. 70 max. 186
VH 132D CNC50	n° 2 mandrini DIN 55058-16 min. 35 max. 151 completa di cono ISO 50	2 spindles DIN55058-16 min. 35 max. 151 with shank ISO 50
VH 132P CNC50	n° 2 mandrini a pinza min. 35 max. 151 completa di cono ISO 50	2 spindles for spring collets min. 35 max. 151 with shank ISO 50
VH 132 W12	n° 2 mandrini foro cilindrico diam. 12 min. 35 max. 151	2 spindles diam. 12 min. 35 max. 151
VH 132-260 D	n° 2 mandrini DIN 55058-16 min. 144 max. 260	2 spindles DIN 55058-16 min. 144 max. 260
VH 134P CNC50	n° 4 mandrini a 90° a pinza, min. 75 max. 191 completa di cono ISO 50	4 spindles at 90° for spring collets,min. 75 max. 191 with shank ISO 50
VH 181 R 1-2	n° 1 mandrino diam. 16 min. 16,5 max. 82,5 rapp. 1-2	1 spindle diam. 16, min. 16,5 max. 82,5 ratio 1-2
VH 182 LP	n° 2 mandrini a pinza, min. 82 max. 214	2 spindles for spring collets, min. 82 max. 214
VH 182 LD	n° 2 mandrini DIN 55058-28 min. 82 max. 214	2 spindles DIN 55058-28 min. 82 max. 214
VH 182 W16	n° 2 mandrini foro cilindrico diam. 16 min. 41 max. 173	2 spindles diam 16, min. 41 max. 173
VH 182 P CNC 50	n° 2 mandrini a pinza, min. 41 max. 173 completa di cono ISO 50	2 spindles for spring collets, min. 41 max. 173 with shank ISO 50
VH 182 P R.1-2	n° 2 mandrini a pinza, min. 41 max. 173 173 rapp. 1-2	2 spindles for spring collets, min. 41 max. 173 ratio 1-2
VH 182D R. 1-2	n° 2 mandrini DIN 55058-28 min. 41 max. 173 rapp. 1-2	2 spindles DIN 55058-28, min. 41 max. 173 ratio 1-2
VH 183 L W16	n° 3 mandrini foro cilindrico diam. 16 min. 41+41 max. 107+107	3 spindles diam.16 min. 41+41 max. 107+107
VH 252 LD	n° 2 mandrini DIN 55058-36 min. 110 max. 294	2 spindles DIN 55058-36, min. 110 max. 294




VH 183
VH 064
VH 184
VH 084
VH 103
VH 134
VH 044
VH 104
VH 043



VH

GALLERY

SERIE TSI TSX





Le teste multiple ad assi variabili serie TSI-TSX progettate a due mandrini paralleli o convergenti, sono adatte in lavorazioni di fresatura ed in particolare per la smussatura dei denti di ingranaggi.

Varie sono le caratteristiche tecniche delle teste multiple ad assi variabili serie TSI-TSX e sintetizzandone solamente alcune possiamo dire che:

- il corpo è in lega di alluminio;
- i supporti mandrino in ghisa e la loro regolazione avviene con un'unica azione dell'operatore;
- i mandrini possono ruotare concordi o discordi e la lubrificazione della testa è a grasso.

La loro realizzazione si è resa possibile in virtù dell'esperienza acquisita nella costruzione di teste multiple, della conoscenza dei processi produttivi e dalla capacità di saper proporre, per ogni particolare esigenza, prodotti qualificati.

The adjustable multispindle heads TSI and TSX series with two parallel or convergent spindles are suitable to mill and to chamfering the gear teeth. This is a solid, compact, reliable unit that also has a nice look.

The adjustable multispindle heads TSI and TSX series have many different features among which:

- *an aluminum body;*
- *cast iron spindle support, simply and easy adjusted by the operator;*
- *the spindles may turn in the same direction or in apposite direction and the adjustment of both spindles is achieved thanks to a single act. The tool connection may be cylindric or with spring collets. The lubrication is by long life grease.*

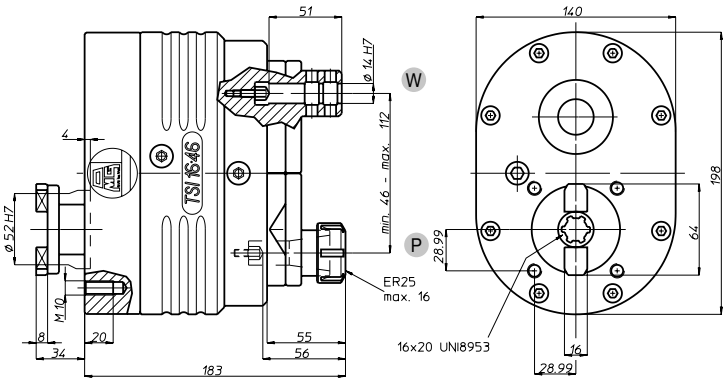
The production of our twin adjustable multispindle head was made possible thanks to the experience acquired in the construction of multispindle heads, our knowledge of production process and our ability to know how to cater for individual requirements with qualified products.

TSI 1646

TESTA DI FRESATURA · *TWIN SPINDLE MILLING HEAD*



	TSI 16-46C-P TSI 16-46C-W	TSI 16-46D-P TSI 16-46D-W
PESO *WEIGHT*	12 KG	12 KG
ROTAZIONE MANDRINI *SPINDLE ROTATION*		
RAPPORTO *RATIO*	1-2	1-2
GIRI MAX *RPM*	3000	3000

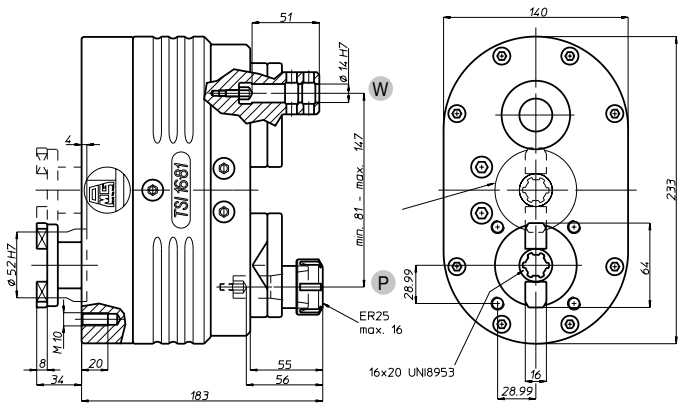


TSI 1681

TESTA DI FRESATURA · *TWIN SPINDLE MILLING HEAD*



	TSI 16-81C-P TSI 16-81C-W	TSI 16-81D-P TSI 16-81D-W
PESO *WEIGHT*	13,5 KG	13,5 KG
ROTAZIONE MANDRINI *SPINDLE ROTATION*		
RAPPORTO *RATIO*	1-2	1-2
GIRI MAX *RPM*	3000	3000



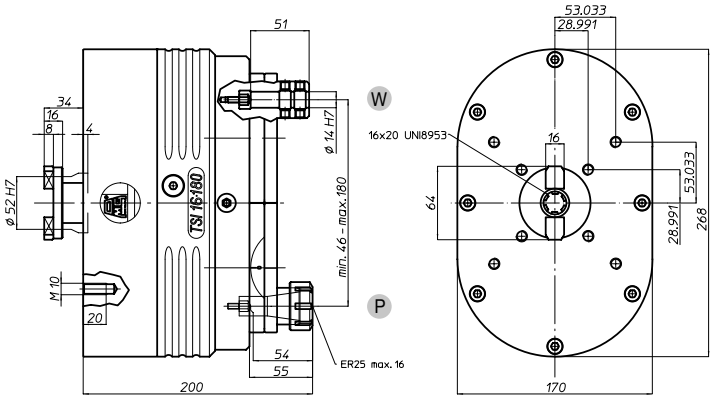
TSI 16180

TESTA DI FRESATURA · *TWIN SPINDLE MILLING HEAD*

8-4

	TSI 16-180C-P TSI 16-180C-W	TSI 16-180D-P TSI 16-180D-W
PESO *WEIGHT*	22,5 KG	22,5 KG
ROTAZIONE MANDRINI *SPINDLE ROTATION*		
RAPPORTO *RATIO*	1-1	1-1
GIRI MAX *RPM*	3000	3000



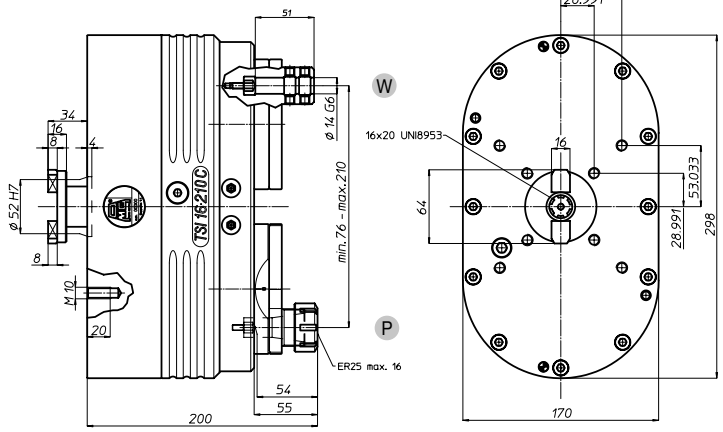


TSI 16210

TESTA DI FRESATURA · *TWIN SPINDLE MILLING HEAD*

	TSI 16-210C-P TSI 16-210C-W	TSI 16-210D-P TSI 16-210D-W
PESO *WEIGHT*	22,5 KG	22,5 KG
ROTAZIONE MANDRINI *SPINDLE ROTATION*		
RAPPORTO *RATIO*	1-1	1-1
GIRI MAX *RPM*	3000	3000





TSX 13C

TESTA DI FRESATURA • *TWIN SPINDLE MILLING HEAD*



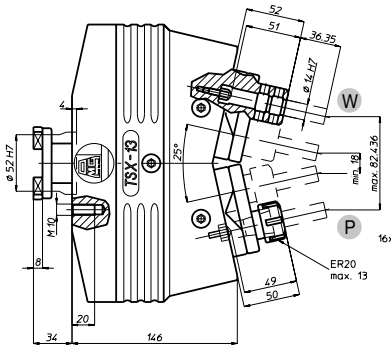
TSX 13C-P
TSX 13C-W

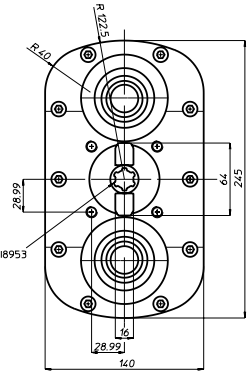
PESO *WEIGHT*
15,5 KG

ROTAZIONE MANDRINI *SPINDLE ROTATION*

RAPPORTO *RATIO*
1-1

GIRI MAX *RPM*
3000





TSX 13D

TESTA DI FRESATURA • *TWIN SPINDLE MILLING HEAD*



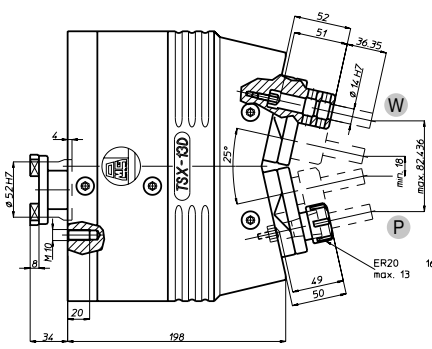
TSX 13D-P
TSX 13D-W

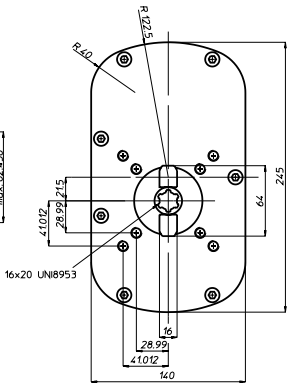
PESO *WEIGHT*
21 KG

ROTAZIONE MANDRINI *SPINDLE ROTATION*

RAPPORTO *RATIO*
1-1

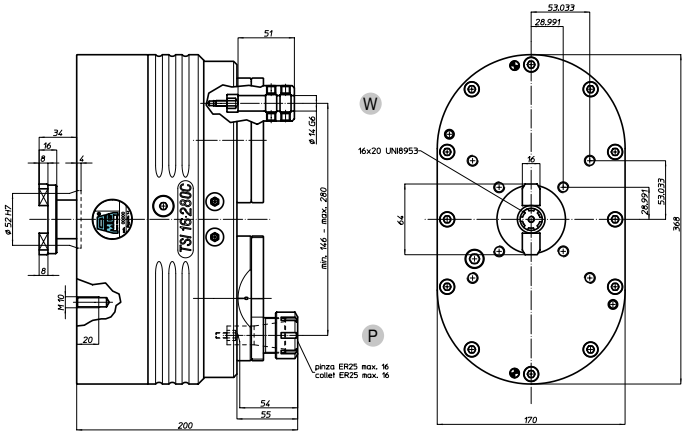
GIRI MAX *RPM*
3000





	TSI 16-280C-P TSI 16-280C-W	TSI 16-280D-P TSI 16-280D-W
PESO *WEIGHT*	22,5 KG	22,5 KG
ROTAZIONE MANDRINI *SPINDLE ROTATION*		
RAPPORTO *RATIO*	1-1	1-1
GIRI MAX *RPM*	3000	3000





TFS 23801

Testa di spuntatura con angolo di 34°
Fixed twin-spindle milling head with 34° from the axis



TS 31588

Testa di spuntatura ad assi variabili, interasse min. 55 max 205,24
Adjustable twin multispindle milling head, centre distance min. 55 max 205,24



TFS 20205

Testa di spuntatura ad assi sghembi, angolo di 25°
Fixed twin-spindle milling head with skew axis at 25°



TFS 14005

Testa di spuntatura ad assi fissi e paralleli, distanza mm 40
Fixed twin-spindle milling head, axis distance mm 40



ESECUZIONI SPECIALI
SPECIAL EXECUTIONS

SERIE





Le teste multiple a giunti universali sono in produzione dal 1961 e confermano tutt'oggi la validità dell'idea 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.

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:

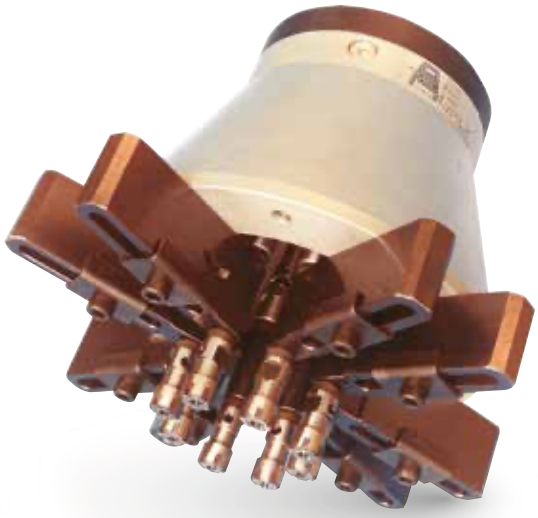
- *possibility of using for both drilling and tapping*
- *possibility of multi-positioning the spindle units, restricted only by the size of the spindle and of the working area*
- *suitable for all types of drills or for special solutions*
- *especially useful when the need arises to frequently change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

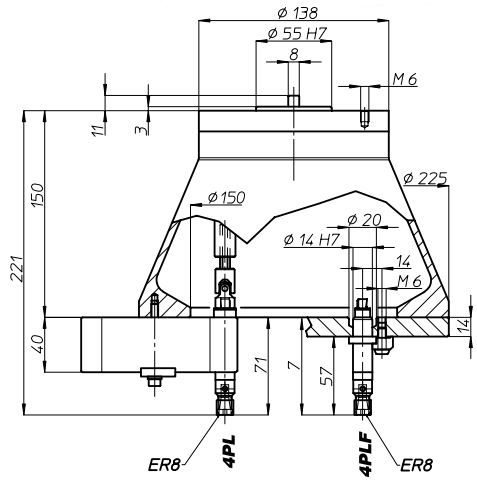
The following versions are in stock:

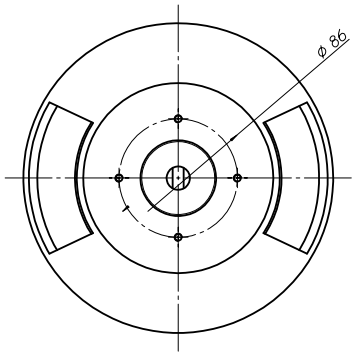
- *series T-TS with round base for making up to 12 holes; max drilling capacity dia. 22 mm, minimum centre distance 15 mm, max centre distance 350 mm*
- *series TL with linear base for making up to 12 holes; max drilling capacity dia. 22 mm, minimum centre distance 17 mm, max centre distance 610 mm*
- *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.*

T2

TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*

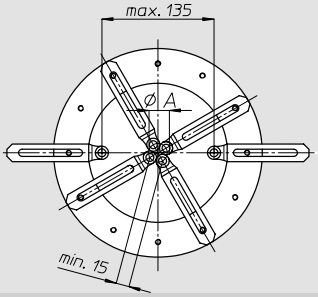






08	N° PRESE DI MOTO *NR. SPINDLE DRIVES*
1-1	RAPPORTO *RATIO*
4	CAPACITÀ DI FORATURA *DRILLING CAPACITY*
M4	MASCHIATURA *TAPPING*
P: ER8	ATTACCO UTENSILE *TYPE OF SPINDLE*
3,25 KG	PESO GRUPPO TESTA *HEAD WEIGHT*
0,3 KG	PESO GRUPPO MANDRINO *SPINDLE-SET WEIGHT*

Ø A	15	17,5	21,5	26	30	35	39,5
N° MANDRINI *N° SPINDLES*	2	3	4	5	6	7	8



AREA DI LAVORO
WORKING AREA

CODICE TESTA
HEAD CODE

TESTA MODELLO
HEAD TYPE
T2

08 — PRESE DI MOTO *DRIVES*

R — PRESA DI MOTO ATTACCO RAPIDO *QUICK DRIVE CONNECTION*

CODICE MANDRINO
SPINDLE CODE

R — TRASMISSIONE ATTACCO RAPIDO *TRASMISSION QUICK CONNECTION*

4 — CAPACITÀ FORATURA *DRILLING CAPACITY*

P — ER 8

L — SERIE LEGGERA *LIGHT SERIE*

F — ASTUCCIO *FIXED SPINDLE*

T4

TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*



N° PRESE DI MOTO
NR. SPINDLE DRIVES
08

RAPPORTO
RATIO
1-1

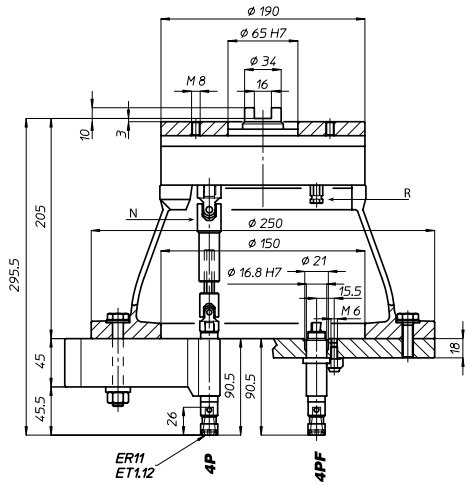
CAPACITÀ DI FORATURA
DRILLING CAPACITY
acciaio / ***still*** R=500 N/mm² 4
ghisa / ***cast iron***: GG25 5

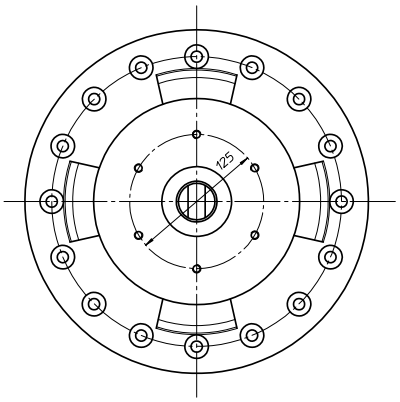
MASCHIATURA
TAPPING
M4

ATTACCO UTENSILE
TYPE OF SPINDLE
P: ER11

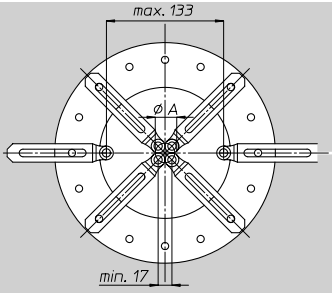
PESO GRUPPO TESTA
HEAD WEIGHT
9,5 KG

PESO GRUPPO MANDRINO
SPINDLE-SET WEIGHT
1 KG





ø A	20	24,5	29,5	34,5	39,5	45
N° MANDRINI *N° SPINDLES*	3	4	5	6	7	8



AREA DI LAVORO
WORKING AREA

CODICE TESTA
HEAD CODE

TESTA MODELLO
HEAD TYPE
T4

08
PRESE DI MOTO
DRIVES

N
PRESA DI MOTO NORMALE
STANDARD DRIVE

R
PRESA DI MOTO ATTACCO RAPIDO
QUICK DRIVE CONNECTION

CODICE MANDRINO
SPINDLE CODE

N
TRASMISSIONE NORMALE
STANDARD TRASMISSION

R
TRASMISSIONE ATTACCO RAPIDO
TRASMISSION QUICK CONNECTION

4
CAPACITÀ FORATURA
DRILLING CAPACITY

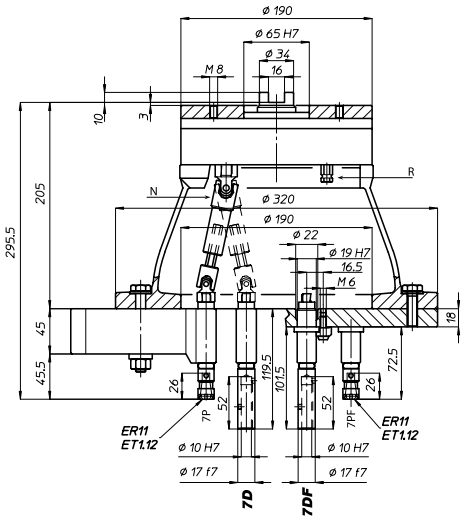
P
PINZA

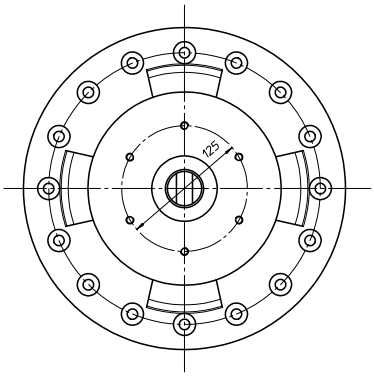
F
ASTUCCIO
FIXED SPINDLE

T7

TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*

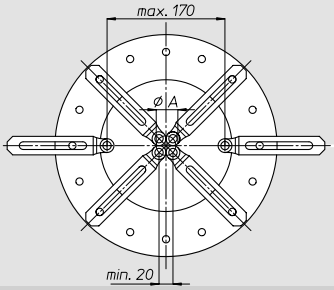






08-12	N° PRESE DI MOTO *NR. SPINDLE DRIVES*
1-1	RAPPORTO *RATIO*
acciaio / *still* R=500 N/mm² 6 **ghisa** / *cast iron*: GG25 7	CAPACITÀ DI FORATURA *DRILLING CAPACITY*
M5	MASCHIATURA *TAPPING*
D: DIN 55058 Ø10 P: ER11	ATTACCO UTENSILE *TYPE OF SPINDLE*
10 KG	PESO GRUPPO TESTA *HEAD WEIGHT*
1,1 KG	PESO GRUPPO MANDRINO *SPINDLE-SET WEIGHT*

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



AREA DI LAVORO *WORKING AREA*

CODICE TESTA *HEAD CODE*

TESTA MODELLO *HEAD TYPE*: **T7**

PRESA DI MOTO NORMALE *STANDARD DRIVE*: 08, 12

PRESA DI MOTO *DRIVES*: N

PRESA DI MOTO ATTACCO RAPIDO *QUICK DRIVE CONNECTION*: R

CAPACITÀ FORATURA *DRILLING CAPACITY*: 7

TRASMISSIONE NORMALE *STANDARD TRASMISSION*: N

TRASMISSIONE ATTACCO RAPIDO *TRASMISSION QUICK CONNECTION*: R

DIN 55058: D

PINZA: P

ASTUCCIO *FIXED SPINDLE*: F

CODICE MANDRINO *SPINDLE CODE*

T10

TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*



N° PRESE DI MOTO
NR. SPINDLE DRIVES
08-12

RAPPORTO
RATIO
1-1

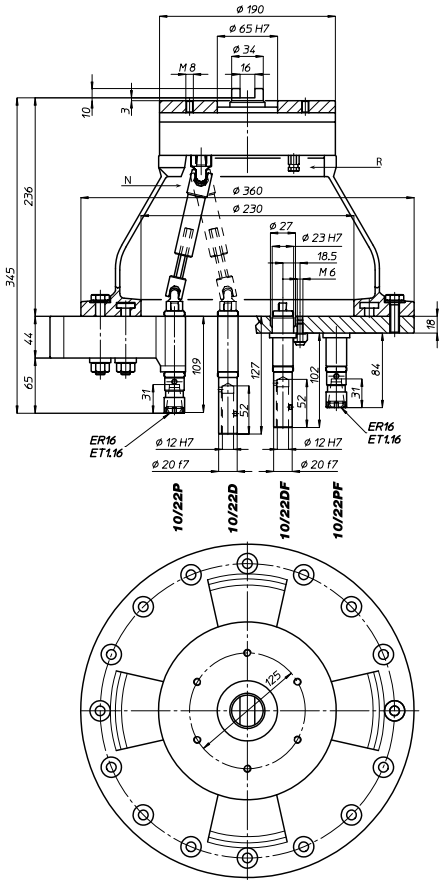
CAPACITÀ DI FORATURA
DRILLING CAPACITY
acciaio / *still* R=500 N/mm² 8
ghisa / *cast iron*: GG25 10

MASCHIATURA
TAPPING
M6

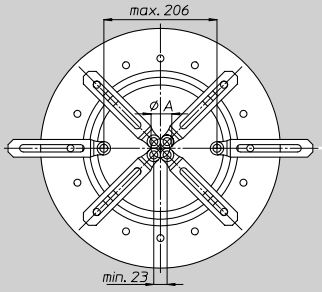
ATTACCO UTENSILE
TYPE OF SPINDLE
D: DIN 55058 Ø12
P: ER16

PESO GRUPPO TESTA
HEAD WEIGHT
12 KG

PESO GRUPPO MANDRINO
SPINDLE-SET WEIGHT
1,5 KG



Ø A	27	33	39,5	46,5	53,5	60,5	67,5	75	82	89,5
N° MANDRINI *N° SPINDLES*	3	4	5	6	7	8	9	10	11	12



AREA DI LAVORO
WORKING AREA

CODICE TESTA
HEAD CODE

TESTA MODELLO
HEAD TYPE
T10

08 — PRESE DI MOTO *DRIVES*
12 — PRESE DI MOTO *DRIVES*
N — PRESA DI MOTO NORMALE *STANDARD DRIVE*
R — PRESA DI MOTO ATTACCO RAPIDO *QUICK DRIVE CONNECTION*

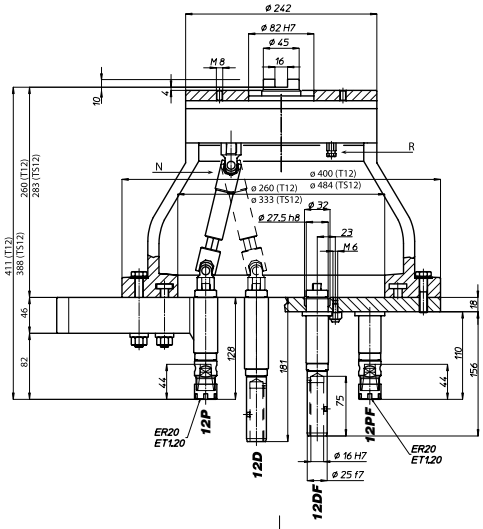
CAPACITÀ FORATURA *DRILLING CAPACITY*
TRASMISSIONE NORMALE *STANDARD TRASMISSION*
N
R — TRASMISSIONE ATTACCO RAPIDO *TRASMISSION QUICK CONNECTION*
10/22
DIN 55058
D
P — PINZA
F — ASTUCCIO *FIXED SPINDLE*

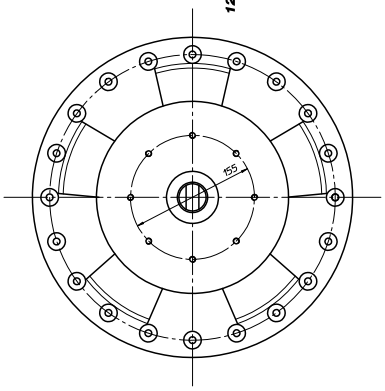
CODICE MANDRINO
SPINDLE CODE

T12-TS12

TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*

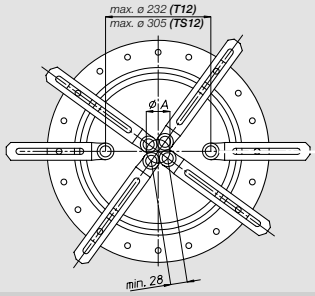






08-12	N° PRESE DI MOTO *NR. SPINDLE DRIVES*
1-1	RAPPORTO *RATIO*
acciaio / *still* R=500 N/mm² 10 ghisa / *cast iron*: GG25 12	CAPACITÀ DI FORATURA *DRILLING CAPACITY*
M8	MASCHIATURA *TAPPING*
D: DIN 55058 Ø16 P: ER20	ATTACCO UTENSILE *TYPE OF SPINDLE*
T12: 20 KG TS12:22,5 KG	PESO GRUPPO TESTA *HEAD WEIGHT*
2 KG	PESO GRUPPO MANDRINO *SPINDLE-SET WEIGHT*

Ø A	33	40	48	56,5	65	74	82,5	91	100	108,5
N° MANDRINI *N° SPINDLES*	3	4	5	6	7	8	9	10	11	12



AREA DI LAVORO *WORKING AREA*

CODICE TESTA *HEAD CODE*

TESTA MODELLO *HEAD TYPE*: T12 / TS12

PRESA DI MOTO NORMALE *STANDARD DRIVE*: 08 / 12

PRESE DI MOTO *DRIVES*

N

R

PRESA DI MOTO ATTACCO RAPIDO *QUICK DRIVE CONNECTION*

CAPACITÀ FORATURA *DRILLING CAPACITY*: 12

TRASMISSIONE NORMALE *STANDARD TRASMISSION*: N

TRASMISSIONE ATTACCO RAPIDO *TRASMISSION QUICK CONNECTION*: R

DIN 55058: D

ASTUCCIO *FIXED SPINDLE*: F

CODICE MANDRINO *SPINDLE CODE*

T15-TS15

TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*



N° PRESE DI MOTO
NR. SPINDLE DRIVES
08-12

RAPPORTO
RATIO
1-1

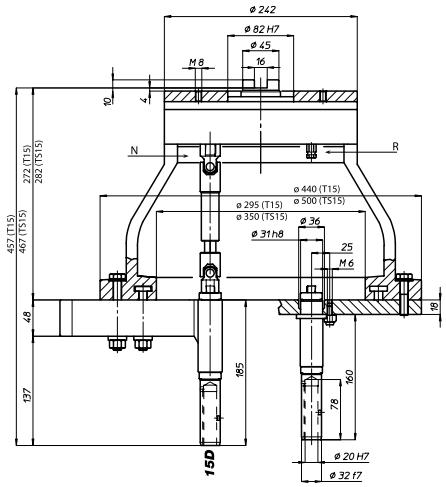
CAPACITÀ DI FORATURA
DRILLING CAPACITY
acciaio / ***still*** R=500 N/mm² 13
ghisa / ***cast iron***: GG25 15

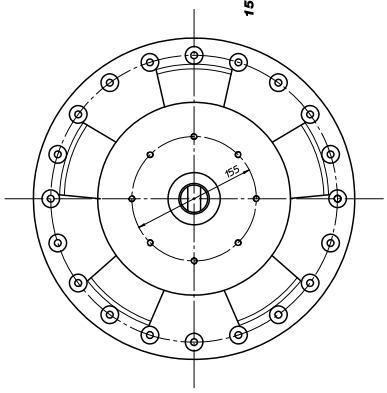
MASCHIATURA
TAPPING
M12

ATTACCO UTENSILE
TYPE OF SPINDLE
D: DIN 55058 Ø20

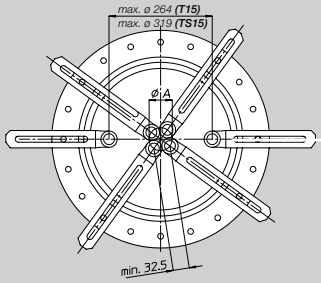
PESO GRUPPO TESTA
HEAD WEIGHT
T15: 21,5 KG
TS15: 24,5 KG

PESO GRUPPO MANDRINO
SPINDLE-SET WEIGHT
2,6 KG





Ø A	38	46,5	56	65,5	75,5	85,5	95,5	105,5	116	126
N° MANDRINI *N° SPINDLES*	3	4	5	6	7	8	9	10	11	12



AREA DI LAVORO
WORKING AREA

CODICE TESTA
HEAD CODE

TESTA MODELLO *HEAD TYPE*
T15
TS15

08
12
PRESE DI MOTO *DRIVES*

PRESA DI MOTO NORMALE *STANDARD DRIVE*
N
R
PRESA DI MOTO ATTACCO RAPIDO *QUICK DRIVE CONNECTION*

TRASMISSIONE NORMALE *STANDARD TRASMISSION*
N
R
TRASMISSIONE ATTACCO RAPIDO *TRASMISSION QUICK CONNECTION*

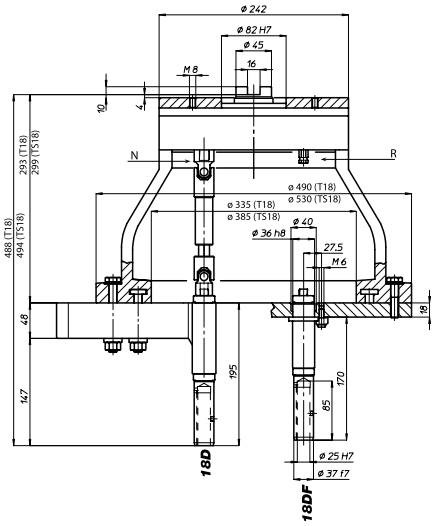
15
DIN 55058
D
F
ASTUCCIO *FIXED SPINDLE*

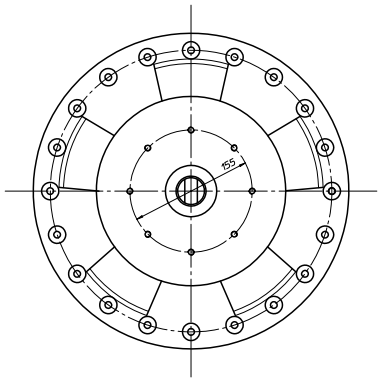
CODICE MANDRINO
SPINDLE CODE

T18-TS18

TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*







08 — N° PRESE DI MOTO / *NR. SPINDLE DRIVES*

1-1 — RAPPORTO / *RATIO*

acciaio / *still* R=500 N/mm² 16
ghisa / *cast iron*: GG25 18
CAPACITÀ DI FORATURA / *DRILLING CAPACITY*

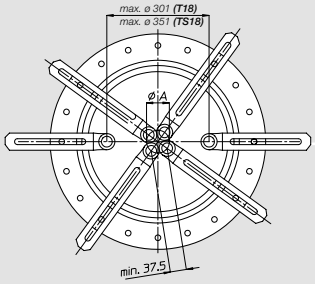
M14 — MASCHIATURA / *TAPPING*

D: DIN 55058 Ø25 — ATTACCO UTENSILE / *TYPE OF SPINDLE*

T18: 25 KG
TS18:26,5 KG
PESO GRUPPO TESTA / *HEAD WEIGHT*

3,3 KG — PESO GRUPPO MANDRINO / *SPINDLE-SET WEIGHT*

Ø A	44	53,5	64,5	75,5	87	98,5
N° MANDRINI / *N° SPINDLES*	3	4	5	6	7	8



AREA DI LAVORO / *WORKING AREA*

CODICE TESTA / *HEAD CODE*

TESTA MODELLO / *HEAD TYPE*: **T18** / **TS18**

08 — PRESE DI MOTO / *DRIVES*

PRESA DI MOTO NORMALE / *STANDARD DRIVE*: N
PRESA DI MOTO ATTACCO RAPIDO / *QUICK DRIVE CONNECTION*: R

CAPACITÀ FORATURA / *DRILLING CAPACITY*: 18

TRASMISSIONE NORMALE / *STANDARD TRASMISSION*: N
TRASMISSIONE ATTACCO RAPIDO / *TRASMISSION QUICK CONNECTION*: R

DIN 55058: D

ASTUCCIO / *FIXED SPINDLE*: F

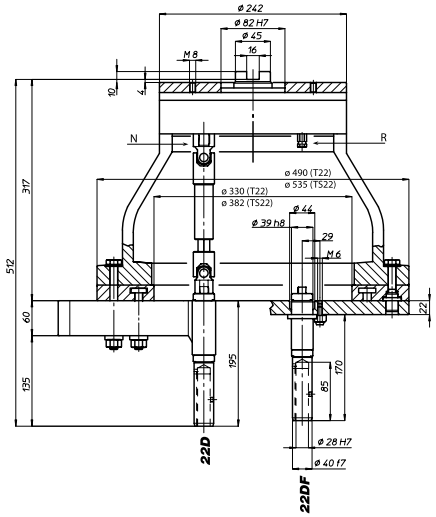
CODICE MANDRINO / *SPINDLE CODE*

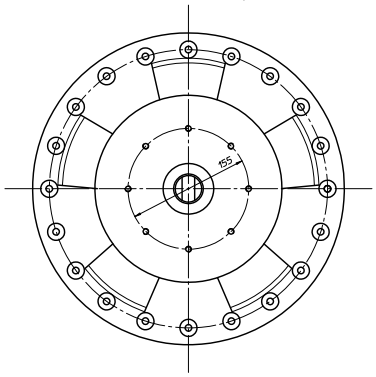
T22-TS22

TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*

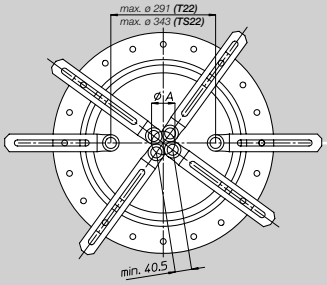


N° PRESE DI MOTO *NR. SPINDLE DRIVES*	08
RAPPORTO *RATIO*	1-1
CAPACITÀ DI FORATURA *DRILLING CAPACITY*	**acciaio** / *still* R=500 N/mm² 20 **ghisa** / *cast iron*: GG25 22
MASCHIATURA *TAPPING*	M16
ATTACCO UTENSILE *TYPE OF SPINDLE*	D: DIN 55058 Ø28
PESO GRUPPO TESTA *HEAD WEIGHT*	T15: 38,5 KG TS15: 41 KG
PESO GRUPPO MANDRINO *SPINDLE-SET WEIGHT*	5,5 KG





Ø A	47,5	58	69,5	81,5	94	106,5
N° MANDRINI *N° SPINDLES*	3	4	5	6	7	8



AREA DI LAVORO *WORKING AREA*

CODICE TESTA *HEAD CODE*

TESTA MODELLO *HEAD TYPE*: **T22** / **TS22**

08 — PRESE DI MOTO *DRIVES*

PRESA DI MOTO NORMALE *STANDARD DRIVE*: **N**

PRESA DI MOTO ATTACCO RAPIDO *QUICK DRIVE CONNECTION*: **R**

CODICE MANDRINO *SPINDLE CODE*

CAPACITÀ FORATURA *DRILLING CAPACITY* — 22

TRASMISSIONE NORMALE *STANDARD TRASMISSION*: **N**

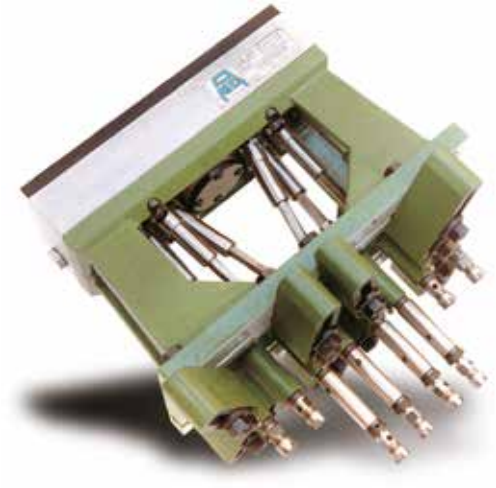
TRASMISSIONE ATTACCO RAPIDO *TRASMISSION QUICK CONNECTION*: **R**

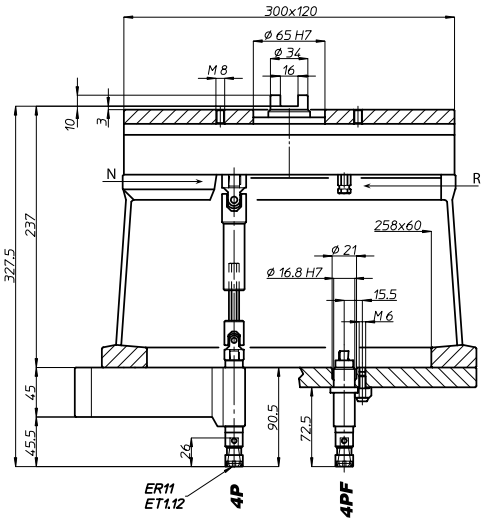
DIN 55058 — **D**

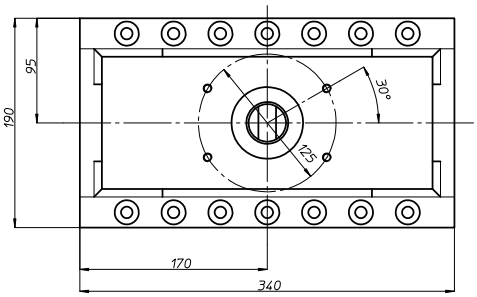
ASTUCCIO *FIXED SPINDLE*: **F**

TL20/4

TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*







08 — N° PRESE DI MOTO / *NR. SPINDLE DRIVES*

1-1 — RAPPORTO / *RATIO*

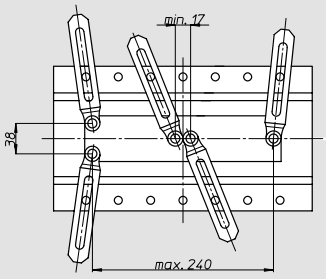
acciaio / *still* R=500 N/mm² 4
ghisa / *cast iron*: GG25 5
— CAPACITÀ DI FORATURA / *DRILLING CAPACITY*

M4 — MASCHIATURA / *TAPPING*

P: ER11 — ATTACCO UTENSILE / *TYPE OF SPINDLE*

13,5 KG — PESO GRUPPO TESTA / *HEAD WEIGHT*

1 KG — PESO GRUPPO MANDRINO / *SPINDLE-SET WEIGHT*



AREA DI LAVORO / *WORKING AREA*

CODICE TESTA / *HEAD CODE*

TESTA MODELLO / *HEAD TYPE*: **TL20/4**

- 08 — PRESE DI MOTO / *DRIVES*
  - N — PRESA DI MOTO NORMALE / *STANDARD DRIVE*
  - R — PRESA DI MOTO ATTACCO RAPIDO / *QUICK DRIVE CONNECTION*

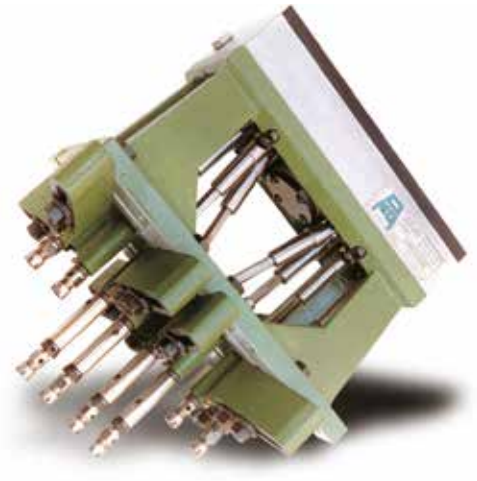
- 4 — CAPACITÀ FORATURA / *DRILLING CAPACITY*
  - N — TRASMISSIONE NORMALE / *STANDARD TRASMISSION*
  - R — TRASMISSIONE ATTACCO RAPIDO / *TRASMISSION QUICK CONNECTION*

- P — PINZA
  - F — ASTUCCIO / *FIXED SPINDLE*

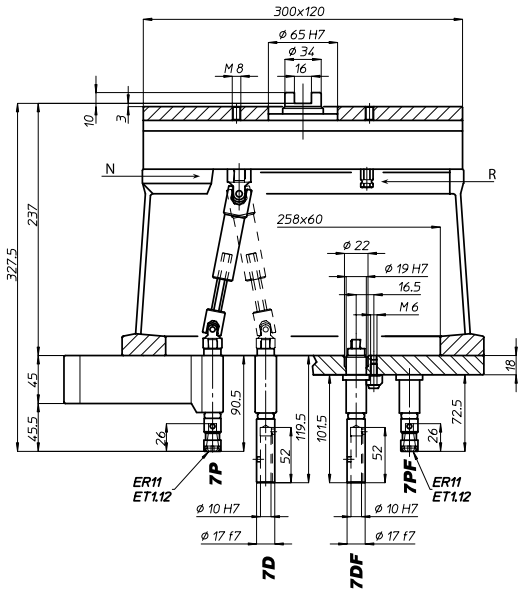
CODICE MANDRINO / *SPINDLE CODE*

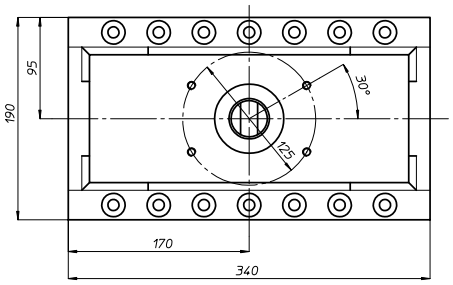
TL20/6

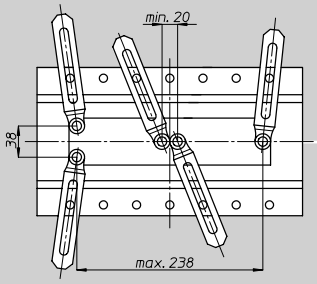
TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*



N° PRESE DI MOTO *NR. SPINDLE DRIVES*	08
RAPPORTO *RATIO*	1-1
CAPACITÀ DI FORATURA *DRILLING CAPACITY*	**acciaio** / *still* R=500 N/mm² 6 **ghisa** / *cast iron*: GG25 7
MASCHIATURA *TAPPING*	M5
ATTACCO UTENSILE *TYPE OF SPINDLE*	D: DIN 55058 Ø10 P: ER11
PESO GRUPPO TESTA *HEAD WEIGHT*	13,5 KG
PESO GRUPPO MANDRINO *SPINDLE-SET WEIGHT*	1 KG







AREA DI LAVORO
WORKING AREA

CODICE TESTA *HEAD CODE*

TESTA MODELLO *HEAD TYPE* **TL20/6**

08 — PRESE DI MOTO *DRIVES*

PRESA DI MOTO NORMALE *STANDARD DRIVE* — N

PRESA DI MOTO ATTACCO RAPIDO *QUICK DRIVE CONNECTION* — R

CAPACITÀ FORATURA *DRILLING CAPACITY* — 7

TRASMISSIONE NORMALE *STANDARD TRASMISSION* — N

TRASMISSIONE ATTACCO RAPIDO *TRASMISSION QUICK CONNECTION* — R

DIN 55058 — D

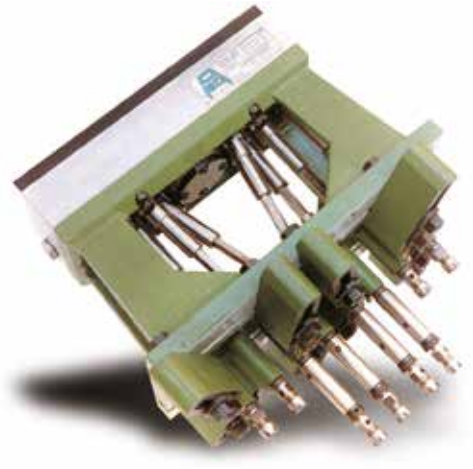
PINZA — P

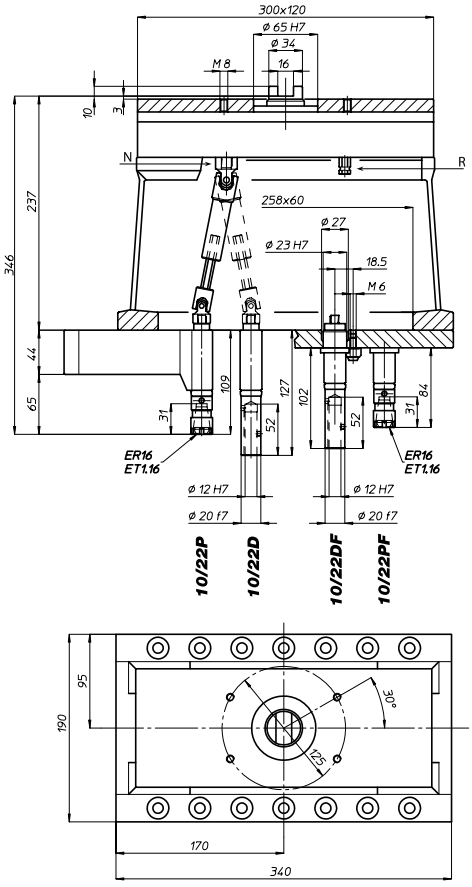
ASTUCCIO *FIXED SPINDLE* — F

CODICE MANDRINO *SPINDLE CODE*

TL20/8

TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*





08 — N° PRESE DI MOTO / *NR. SPINDLE DRIVES*

1-1 — RAPPORTO / *RATIO*

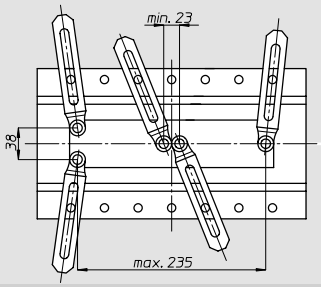
acciaio / *still* R=500 N/mm² 8
ghisa / *cast iron*: GG25 10
— CAPACITÀ DI FORATURA / *DRILLING CAPACITY*

M6 — MASCHIATURA / *TAPPING*

D: DIN 55058 Ø12
P: ER16
— ATTACCO UTENSILE / *TYPE OF SPINDLE*

13,5 KG — PESO GRUPPO TESTA / *HEAD WEIGHT*

1,5 KG — PESO GRUPPO MANDRINO / *SPINDLE-SET WEIGHT*



AREA DI LAVORO / *WORKING AREA*

CODICE TESTA / *HEAD CODE*

TESTA MODELLO / *HEAD TYPE*: **TL20/8**

- 08 — PRESE DI MOTO / *DRIVES*
  - N — PRESA DI MOTO NORMALE / *STANDARD DRIVE*
  - R — PRESA DI MOTO ATTACCO RAPIDO / *QUICK DRIVE CONNECTION*

CAPACITÀ FORATURA / *DRILLING CAPACITY*: 10/22

- TRASMISSIONE NORMALE / *STANDARD TRASMISSION*
  - N — DIN 55058
    - D
    - P — PINZA
  - R — TRASMISSIONE ATTACCO RAPIDO / *TRASMISSION QUICK CONNECTION*
- F — ASTUCCIO / *FIXED SPINDLE*

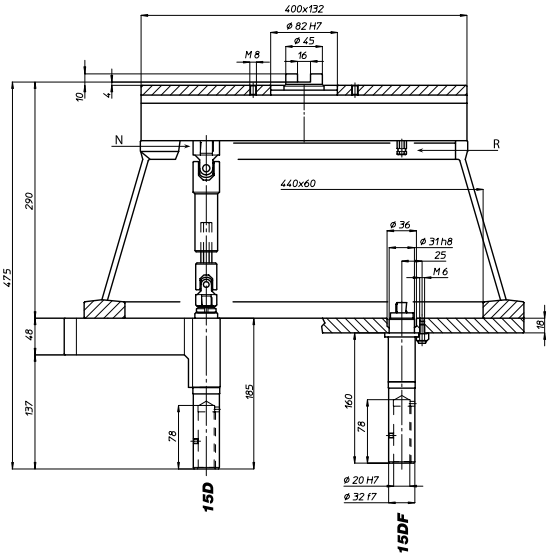
CODICE MANDRINO / *SPINDLE CODE*

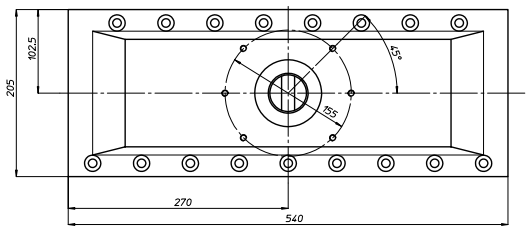
TL40/12

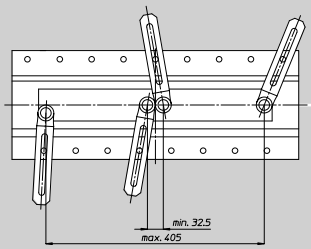
TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*



N° PRESE DI MOTO *NR. SPINDLE DRIVES*	08
RAPPORTO *RATIO*	1-1
CAPACITÀ DI FORATURA *DRILLING CAPACITY*	**acciaio** / *still* R=500 N/mm² 13 **ghisa** / *cast iron*: GG25 15
MASCHIATURA *TAPPING*	M12
ATTACCO UTENSILE *TYPE OF SPINDLE*	D: DIN 55058 Ø20
PESO GRUPPO TESTA *HEAD WEIGHT*	25 KG
PESO GRUPPO MANDRINO *SPINDLE-SET WEIGHT*	2,5 KG







AREA DI LAVORO
WORKING AREA

CODICE TESTA *HEAD CODE*

TESTA MODELLO *HEAD TYPE* **TL40/12**

08 — PRESE DI MOTO *DRIVES*

PRESA DI MOTO NORMALE *STANDARD DRIVE* — N

PRESA DI MOTO ATTACCO RAPIDO *QUICK DRIVE CONNECTION* — R

CAPACITÀ FORATURA *DRILLING CAPACITY*

TRASMISSIONE NORMALE *STANDARD TRASMISSION* — N

TRASMISSIONE ATTACCO RAPIDO *TRASMISSION QUICK CONNECTION* — R

15

DIN 55058 D

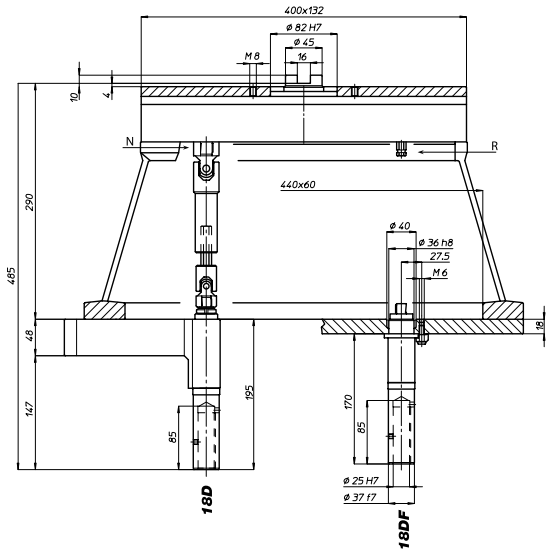
F — ASTUCCIO *FIXED SPINDLE*

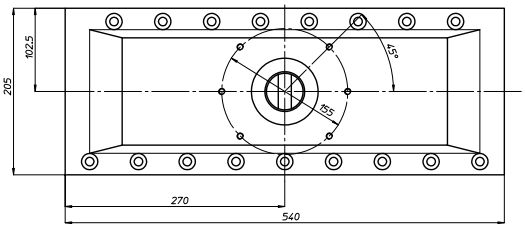
CODICE MANDRINO *SPINDLE CODE*

TL40/16

TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*







08 — N° PRESE DI MOTO / *NR. SPINDLE DRIVES*

1-1 — RAPPORTO / *RATIO*

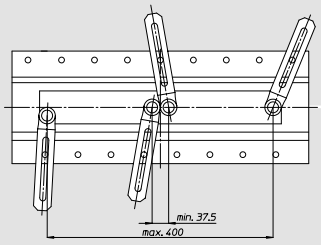
acciaio / *still* R=500 N/mm² 16
ghisa / *cast iron*: GG25 18
— CAPACITÀ DI FORATURA / *DRILLING CAPACITY*

M14 — MASCHIATURA / *TAPPING*

D: DIN 55058 Ø25 — ATTACCO UTENSILE / *TYPE OF SPINDLE*

26 KG — PESO GRUPPO TESTA / *HEAD WEIGHT*

2,5 KG — PESO GRUPPO MANDRINO / *SPINDLE-SET WEIGHT*



AREA DI LAVORO / *WORKING AREA*

CODICE TESTA / *HEAD CODE*

TESTA MODELLO / *HEAD TYPE*: **TL40/16**

- 08 — PRESE DI MOTO / *DRIVES*
  - N — PRESA DI MOTO NORMALE / *STANDARD DRIVE*
  - R — PRESA DI MOTO ATTACCO RAPIDO / *QUICK DRIVE CONNECTION*
- 18 — CAPACITÀ FORATURA / *DRILLING CAPACITY*
  - N — TRASMISSIONE NORMALE / *STANDARD TRASMISSION*
  - R — TRASMISSIONE ATTACCO RAPIDO / *TRASMISSION QUICK CONNECTION*
- D — DIN 55058
- F — ASTUCCIO / *FIXED SPINDLE*

CODICE MANDRINO / *SPINDLE CODE*

TL40/22

TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*



N° PRESE DI MOTO
NR. SPINDLE DRIVES
06

RAPPORTO
RATIO
1-1

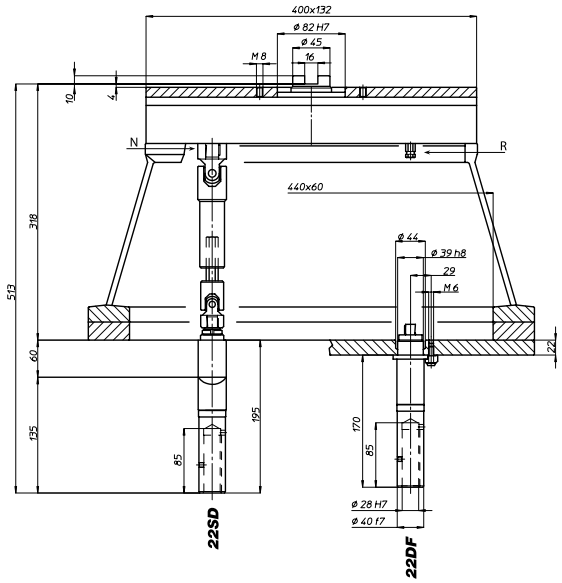
CAPACITÀ DI FORATURA
DRILLING CAPACITY
acciaio / *still* R=500 N/mm² 20
ghisa / *cast iron*: GG25 22

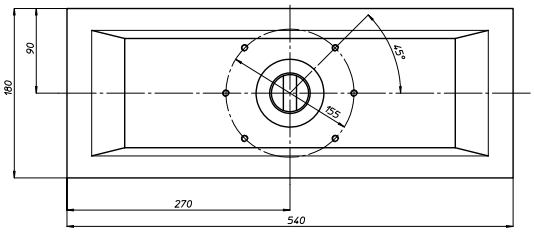
MASCHIATURA
TAPPING
M16

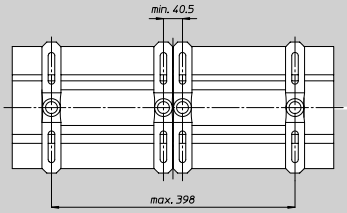
ATTACCO UTENSILE
TYPE OF SPINDLE
D: DIN 55058 Ø28

PESO GRUPPO TESTA
HEAD WEIGHT
37 KG

PESO GRUPPO MANDRINO
SPINDLE-SET WEIGHT
5 KG







AREA DI LAVORO
WORKING AREA

CODICE TESTA *HEAD CODE*

TESTA MODELLO *HEAD TYPE*: **TL40/22**

06 — PRESE DI MOTO *DRIVES*

- N — PRESA DI MOTO NORMALE *STANDARD DRIVE*
- R — PRESA DI MOTO ATTACCO RAPIDO *QUICK DRIVE CONNECTION*

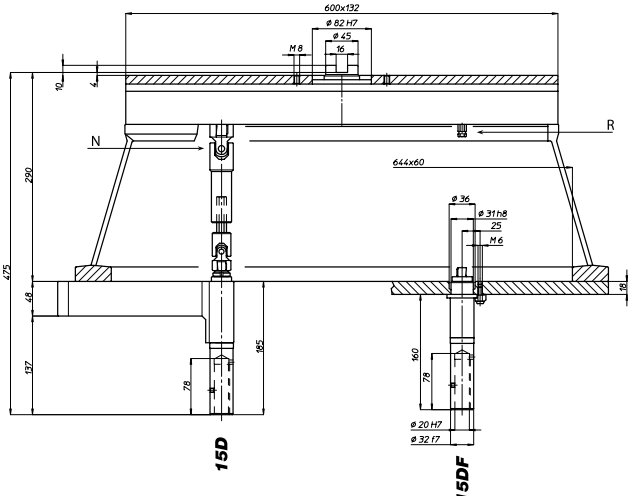
CODICE MANDRINO *SPINDLE CODE*

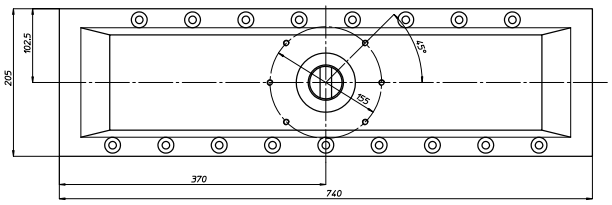
- TRASMISSIONE NORMALE *STANDARD TRASMISSION*: N
- TRASMISSIONE ATTACCO RAPIDO *TRASMISSION QUICK CONNECTION*: R
- CAPACITÀ FORATURA *DRILLING CAPACITY*: 22
- DIN 55058: SD
- ASTUCCIO *FIXED SPINDLE*: F

TL60/12

TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*







08-12 — N° PRESE DI MOTO / *NR. SPINDLE DRIVES*

1-1 — RAPPORTO / *RATIO*

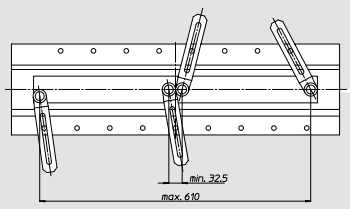
acciaio / *still* R=500 N/mm² 13
ghisa / *cast iron*: GG25 15
— CAPACITÀ DI FORATURA / *DRILLING CAPACITY*

M12 — MASCHIATURA / *TAPPING*

D: DIN 55058 Ø20 — ATTACCO UTENSILE / *TYPE OF SPINDLE*

34,5 KG — PESO GRUPPO TESTA / *HEAD WEIGHT*

2,5 KG — PESO GRUPPO MANDRINO / *SPINDLE-SET WEIGHT*



AREA DI LAVORO / *WORKING AREA*

CODICE TESTA / *HEAD CODE*

TESTA MODELLO / *HEAD TYPE*: **T60/12**

- 08 — PRESA DI MOTO NORMALE / *STANDARD DRIVE*
- 12 — PRESE DI MOTO / *DRIVES*
- N — PRESA DI MOTO NORMALE / *STANDARD DRIVE*
- R — PRESA DI MOTO ATTACCO RAPIDO / *QUICK DRIVE CONNECTION*

CAPACITÀ FORATURA / *DRILLING CAPACITY*

TRASMISSIONE NORMALE / *STANDARD TRASMISSION*
- N
- R — TRASMISSIONE ATTACCO RAPIDO / *TRASMISSION QUICK CONNECTION*

15 — DIN 55058 — D — F — ASTUCCIO / *FIXED SPINDLE*

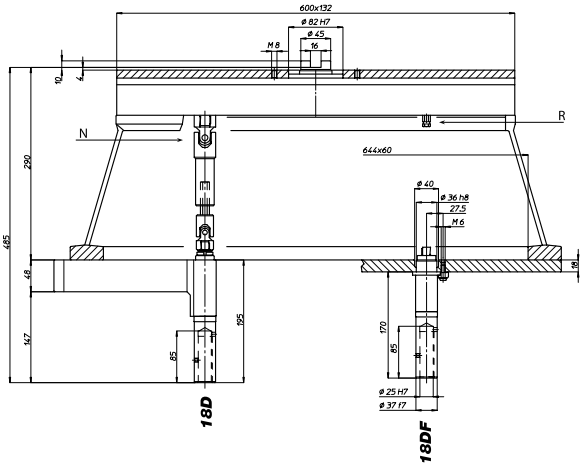
CODICE MANDRINO / *SPINDLE CODE*

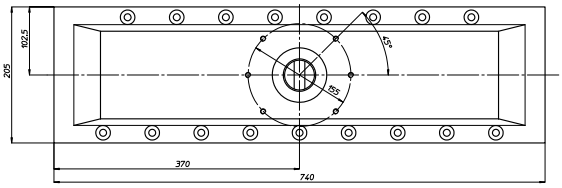
TL60/16

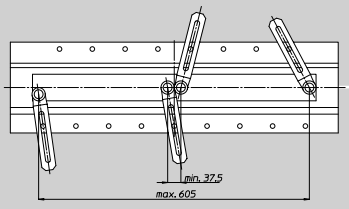
TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*



N° PRESE DI MOTO *NR. SPINDLE DRIVES*	08-12
RAPPORTO *RATIO*	1-1
CAPACITÀ DI FORATURA *DRILLING CAPACITY*	**acciaio** / *still* R=500 N/mm² 16 **ghisa** / *cast iron*: GG25 18
MASCHIATURA *TAPPING*	M14
ATTACCO UTENSILE *TYPE OF SPINDLE*	D: DIN 55058 Ø25
PESO GRUPPO TESTA *HEAD WEIGHT*	36 KG
PESO GRUPPO MANDRINO *SPINDLE-SET WEIGHT*	2,5 KG







AREA DI LAVORO *WORKING AREA*

CODICE TESTA *HEAD CODE*

TESTA MODELLO *HEAD TYPE*: **T60/16**

- 08 — PRESE DI MOTO *DRIVES*
- 12 — PRESE DI MOTO *DRIVES*
- N — PRESA DI MOTO NORMALE *STANDARD DRIVE*
- R — PRESA DI MOTO ATTACCO RAPIDO *QUICK DRIVE CONNECTION*

CODICE MANDRINO *SPINDLE CODE*

- TRASMISSIONE NORMALE *STANDARD TRASMISSION*: N
- TRASMISSIONE ATTACCO RAPIDO *TRASMISSION QUICK CONNECTION*: R
- CAPACITÀ FORATURA *DRILLING CAPACITY*: 18
- DIN 55058: D
- F — ASTUCCIO *FIXED SPINDLE*

TL60/22

TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*



08 — N° PRESE DI MOTO / *NR. SPINDLE DRIVES*

1-1 — RAPPORTO / *RATIO*

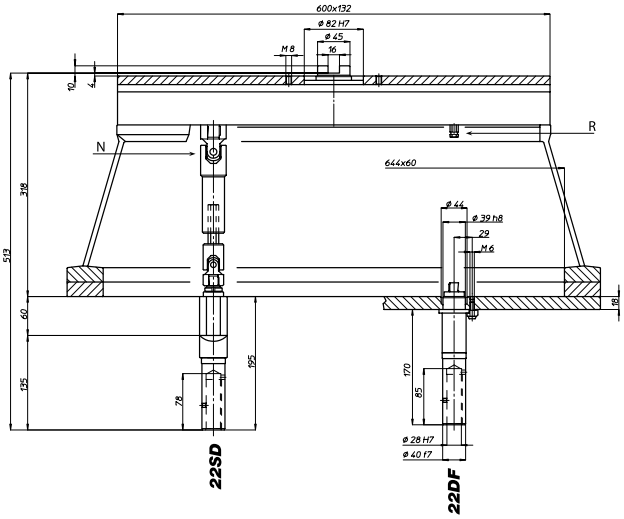
acciaio / *still* R=500 N/mm² 20
ghisa / *cast iron*: GG25 22
— CAPACITÀ DI FORATURA / *DRILLING CAPACITY*

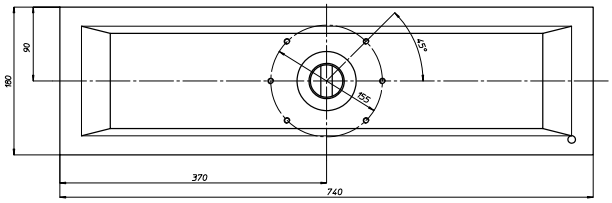
M16 — MASCHIATURA / *TAPPING*

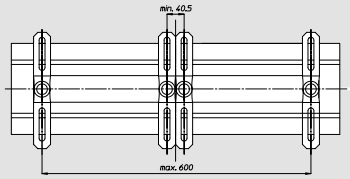
D: DIN 55058 Ø28 — ATTACCO UTENSILE / *TYPE OF SPINDLE*

47,5 KG — PESO GRUPPO TESTA / *HEAD WEIGHT*

5 KG — PESO GRUPPO MANDRINO / *SPINDLE-SET WEIGHT*







AREA DI LAVORO / *WORKING AREA*

CODICE TESTA / *HEAD CODE*

TESTA MODELLO / *HEAD TYPE*: **T60/22**

- 08 — PRESE DI MOTO / *DRIVES*
  - N — PRESA DI MOTO NORMALE / *STANDARD DRIVE*
  - R — PRESA DI MOTO ATTACCO RAPIDO / *QUICK DRIVE CONNECTION*
- 22 — CAPACITÀ FORATURA / *DRILLING CAPACITY*
  - N — TRASMISSIONE NORMALE / *STANDARD TRASMISSION*
  - R — TRASMISSIONE ATTACCO RAPIDO / *TRASMISSION QUICK CONNECTION*
- DIN 55058 SD
- F — ASTUCCIO / *FIXED SPINDLE*

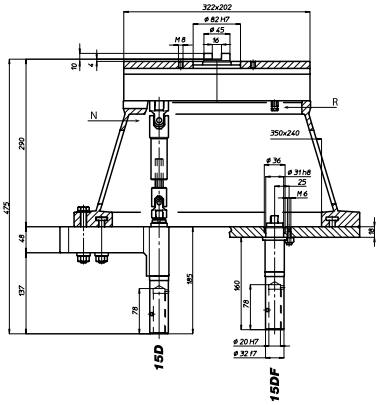
CODICE MANDRINO / *SPINDLE CODE*

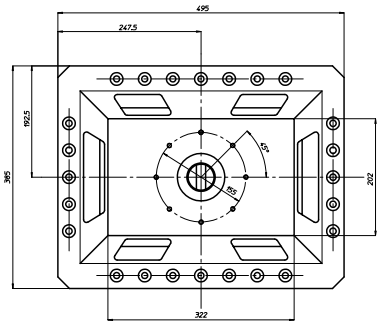
TR2/12

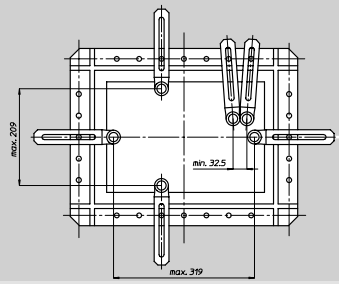
TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*



N° PRESE DI MOTO *NR. SPINDLE DRIVES*	08-12
RAPPORTO *RATIO*	1-1
CAPACITÀ DI FORATURA *DRILLING CAPACITY*	**acciaio** / *still* R=500 N/mm² 13 **ghisa** / *cast iron*: GG25 15
MASCHIATURA *TAPPING*	M12
ATTACCO UTENSILE *TYPE OF SPINDLE*	D: DIN 55058 Ø20
PESO GRUPPO TESTA *HEAD WEIGHT*	30 KG
PESO GRUPPO MANDRINO *SPINDLE-SET WEIGHT*	2,6 KG







AREA DI LAVORO
WORKING AREA

CODICE TESTA
HEAD CODE

TESTA MODELLO *HEAD TYPE*: **TR2/12**

- 08 / 12 — PRESE DI MOTO *DRIVES*
- N — PRESA DI MOTO NORMALE *STANDARD DRIVE*
- R — PRESA DI MOTO ATTACCO RAPIDO *QUICK DRIVE CONNECTION*

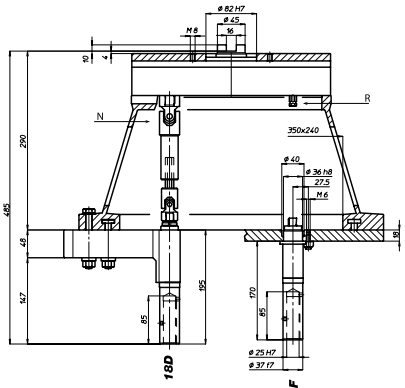
CODICE MANDRINO
SPINDLE CODE

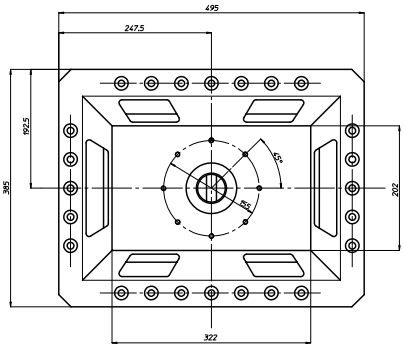
- N — TRASMISSIONE NORMALE *STANDARD TRASMISSION*
- R — TRASMISSIONE ATTACCO RAPIDO *TRASMISSION QUICK CONNECTION*
- 15 — CAPACITÀ FORATURA *DRILLING CAPACITY*
- D — DIN 55058
- F — ASTUCCIO *FIXED SPINDLE*

TR2/16

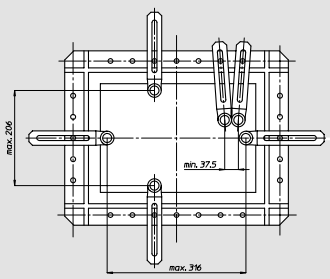
TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*







10	N° PRESE DI MOTO *NR. SPINDLE DRIVES*
1-1	RAPPORTO *RATIO*
acciaio / *still* R=500 N/mm² 16 ghisa / *cast iron*: GG25 18	CAPACITÀ DI FORATURA *DRILLING CAPACITY*
M14	MASCHIATURA *TAPPING*
D: DIN 55058 Ø25	ATTACCO UTENSILE *TYPE OF SPINDLE*
31 KG	PESO GRUPPO TESTA *HEAD WEIGHT*
3,3 KG	PESO GRUPPO MANDRINO *SPINDLE-SET WEIGHT*



AREA DI LAVORO *WORKING AREA*

CODICE TESTA *HEAD CODE*

TESTA MODELLO *HEAD TYPE* **TR2/16** — 08 — PRESE DI MOTO *DRIVES*

PRESA DI MOTO NORMALE *STANDARD DRIVE* — N

PRESA DI MOTO ATTACCO RAPIDO *QUICK DRIVE CONNECTION* — R

CAPACITÀ FORATURA *DRILLING CAPACITY* — 18

TRASMISSIONE NORMALE *STANDARD TRASMISSION* — N

TRASMISSIONE ATTACCO RAPIDO *TRASMISSION QUICK CONNECTION* — R

DIN 55058 — D

ASTUCCIO *FIXED SPINDLE* — F

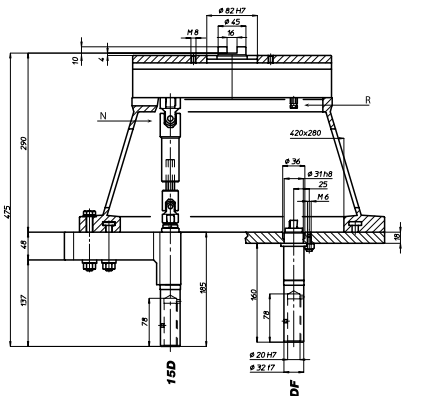
CODICE MANDRINO *SPINDLE CODE*

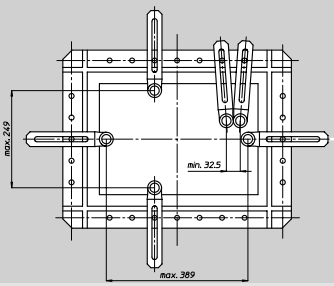
TR5/12

TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*



N° PRESE DI MOTO *NR. SPINDLE DRIVES*	08-12-16
RAPPORTO *RATIO*	1-1
CAPACITÀ DI FORATURA *DRILLING CAPACITY*	**acciaio** / *still* R=500 N/mm² 13 **ghisa** / *cast iron*: GG25 15
MASCHIATURA *TAPPING*	M12
ATTACCO UTENSILE *TYPE OF SPINDLE*	D: DIN 55058 Ø20
PESO GRUPPO TESTA *HEAD WEIGHT*	34,5 KG
PESO GRUPPO MANDRINO *SPINDLE-SET WEIGHT*	2,6 KG





AREA DI LAVORO
WORKING AREA

CODICE TESTA
HEAD CODE

TESTA MODELLO
HEAD TYPE
TR5/12

08 / 12 / 16
PRESE DI MOTO
DRIVES

PRESA DI MOTO NORMALE
STANDARD DRIVE
N

R
PRESA DI MOTO ATTACCO RAPIDO
QUICK DRIVE CONNECTION

TRASMISSIONE NORMALE
STANDARD TRASMISSION
N

TRASMISSIONE ATTACCO RAPIDO
TRASMISSION QUICK CONNECTION
R

CAPACITÀ FORATURA
DRILLING CAPACITY
15

DIN 55058
D

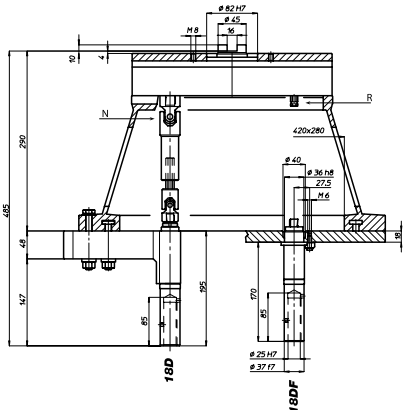
F
ASTUCCIO
FIXED SPINDLE

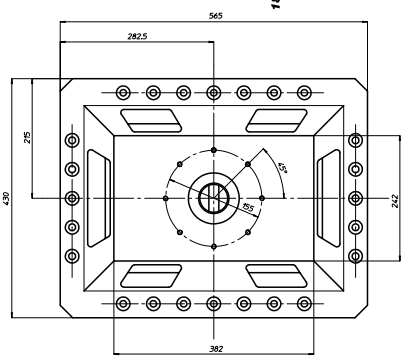
CODICE MANDRINO
SPINDLE CODE

TR5/16

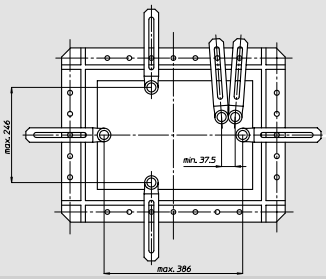
TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*







8-12	N° PRESE DI MOTO *NR. SPINDLE DRIVES*
1-1	RAPPORTO *RATIO*
acciaio / *still* R=500 N/mm² 16 ghisa / *cast iron*: GG25 18	CAPACITÀ DI FORATURA *DRILLING CAPACITY*
M14	MASCHIATURA *TAPPING*
D: DIN 55058 Ø25	ATTACCO UTENSILE *TYPE OF SPINDLE*
36 KG	PESO GRUPPO TESTA *HEAD WEIGHT*
3,3 KG	PESO GRUPPO MANDRINO *SPINDLE-SET WEIGHT*



AREA DI LAVORO *WORKING AREA*

CODICE TESTA *HEAD CODE*

TESTA MODELLO *HEAD TYPE*: **TR5/16**

- 08 / 12 — PRESE DI MOTO *DRIVES*
- PRESA DI MOTO NORMALE *STANDARD DRIVE*: N
- PRESA DI MOTO ATTACCO RAPIDO *QUICK DRIVE CONNECTION*: R

CAPACITÀ FORATURA *DRILLING CAPACITY*: 18

TRASMISSIONE NORMALE *STANDARD TRASMISSION*: N

TRASMISSIONE ATTACCO RAPIDO *TRASMISSION QUICK CONNECTION*: R

DIN 55058: D

ASTUCCIO *FIXED SPINDLE*: F

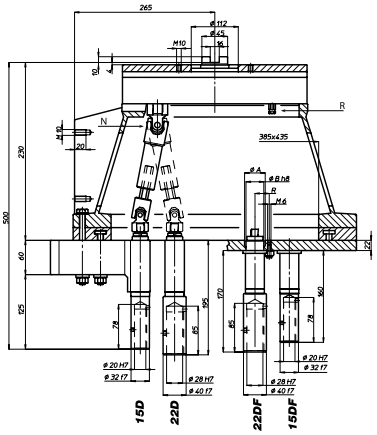
CODICE MANDRINO *SPINDLE CODE*

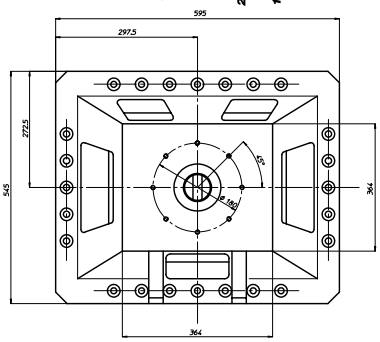
TR8/22

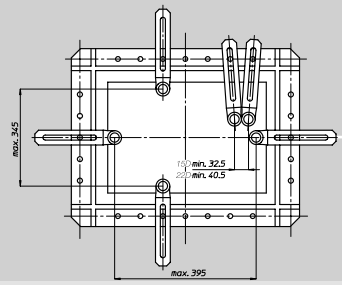
TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*



N° PRESE DI MOTO *NR. SPINDLE DRIVES*	12
RAPPORTO *RATIO*	1-1,5
CAPACITÀ DI FORATURA *DRILLING CAPACITY*	**acciaio** / *still* R=500 N/mm² 15D: 13 22D: 20 **ghisa** / *cast iron*: GG25 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*	86 KG
PESO GRUPPO MANDRINO *SPINDLE-SET WEIGHT*	15D: 4 KG 22D: 5,5 KG







AREA DI LAVORO
WORKING AREA

CODICE TESTA
HEAD CODE

TESTA MODELLO
HEAD TYPE
TR8/22

08
PRESE DI MOTO
DRIVES

PRESA DI MOTO NORMALE
STANDARD DRIVE
N

R
PRESA DI MOTO ATTACCO RAPIDO
QUICK DRIVE CONNECTION

CAPACITÀ FORATURA
DRILLING CAPACITY

TRASMISSIONE NORMALE
STANDARD TRASMISSION
N

R
TRASMISSIONE ATTACCO RAPIDO
TRASMISSION QUICK CONNECTION

15

22

DIN 55058
D

F
ASTUCCIO
FIXED SPINDLE

CODICE MANDRINO
SPINDLE CODE

TM400

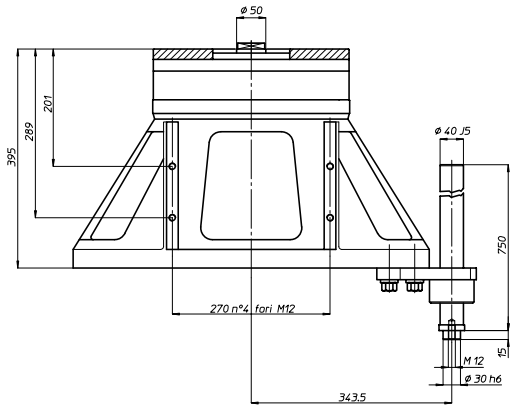
TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*

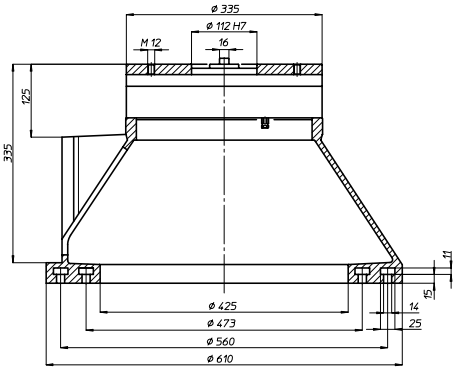


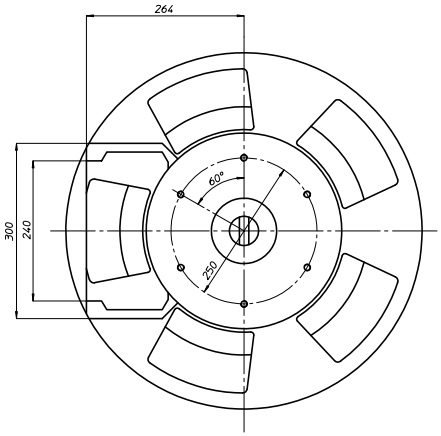
12 — N° PRESE DI MOTO
NR. SPINDLE DRIVES

1-1 — RAPPORTO
RATIO

105 KG — PESO
WEIGHT







CODICE TESTA
HEAD CODE

TESTA MODELLO
HEAD TYPE
TM400

12 — PRESE DI MOTO *DRIVES*

R — PRESA DI MOTO ATTACCO RAPIDO *QUICK DRIVE CONNECTION*

Ø 385 — AREA DI LAVORO *WORKING AREA*

TM500

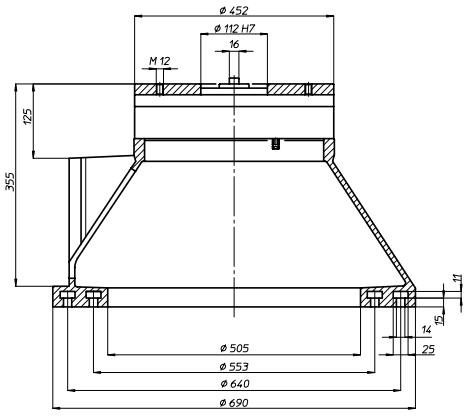
TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*

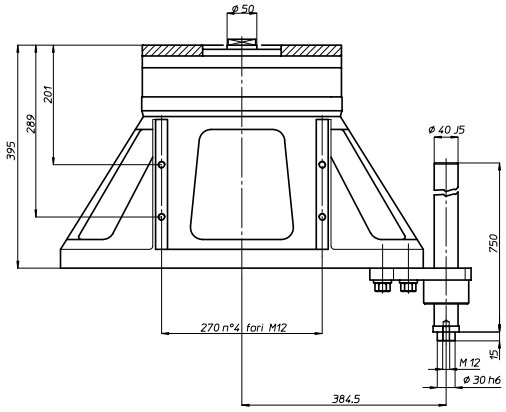


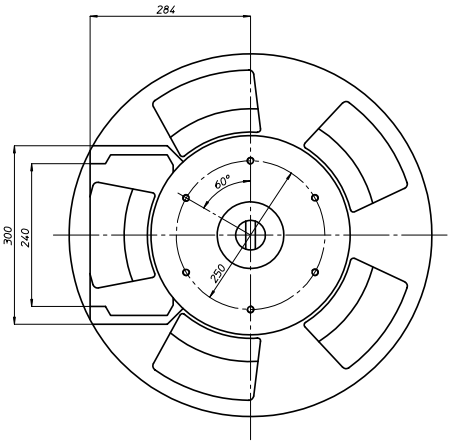
N° PRESE DI MOTO
NR. SPINDLE DRIVES
18

RAPPORTO
RATIO
1-1

PESO
WEIGHT
145 KG







CODICE TESTA
HEAD CODE

TESTA MODELLO
HEAD TYPE
TM500

18
PRESE DI MOTO
DRIVES

R
PRESA DI MOTO ATTACCO RAPIDO
QUICK DRIVE CONNECTION

Ø 465

AREA DI LAVORO
WORKING AREA

TRM43

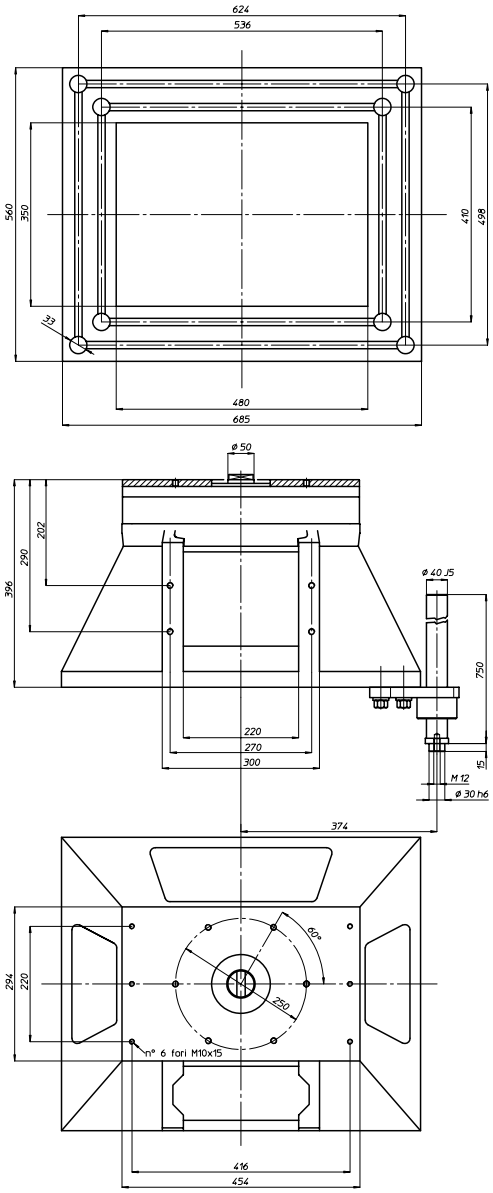
TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*

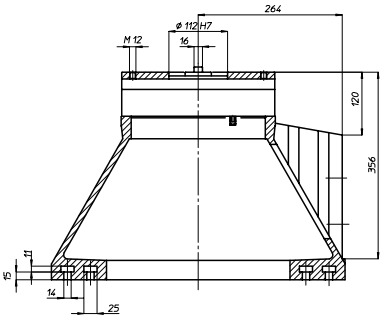


16 — N° PRESE DI MOTO
NR. SPINDLE DRIVES

1-1 — RAPPORTO
RATIO

135 KG — PESO
WEIGHT





CODICE TESTA
HEAD CODE

TESTA MODELLO
HEAD TYPE
TRM43

16
PRESE DI MOTO
DRIVES

R
PRESA DI MOTO ATTACCO RAPIDO
QUICK DRIVE CONNECTION

300x440

AREA DI LAVORO
WORKING AREA

TRM73

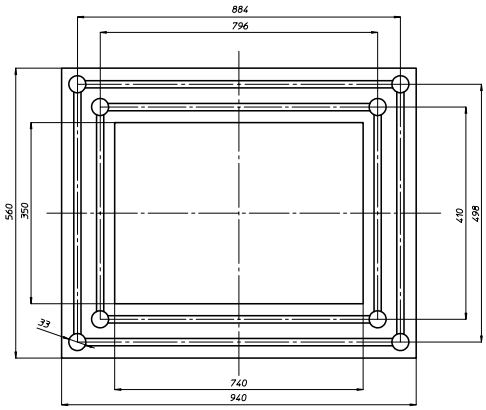
TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*

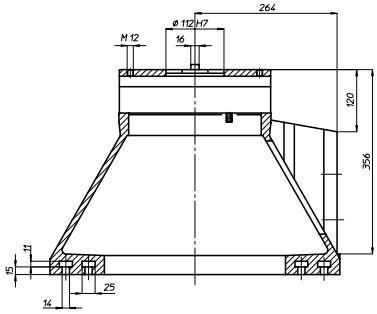


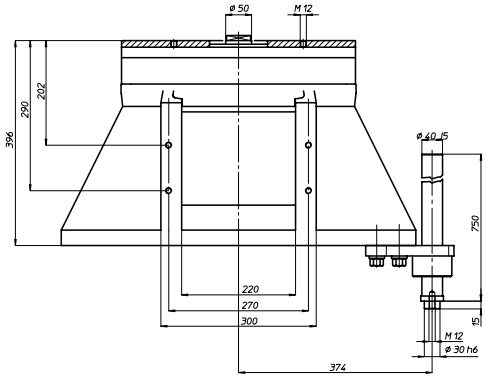
N° PRESE DI MOTO
NR. SPINDLE DRIVES
26

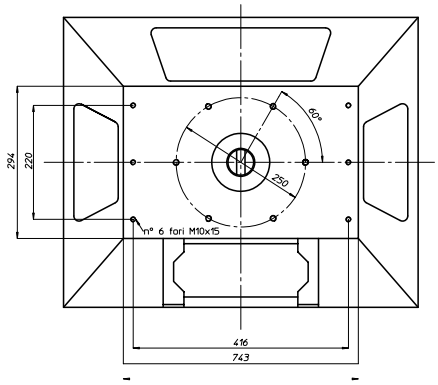
RAPPORTO
RATIO
1-1

PESO
WEIGHT
210 KG









CODICE TESTA
HEAD CODE

TESTA MODELLO
HEAD TYPE
TRM73

26
PRESE DI MOTO
DRIVES

PRESA DI MOTO ATTACCO RAPIDO
QUICK DRIVE CONNECTION
R

300x700

AREA DI LAVORO
WORKING AREA

TRM43-2P

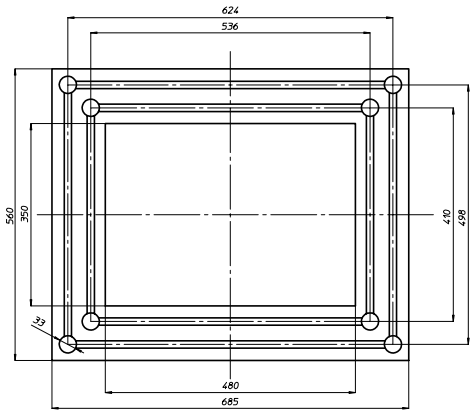
TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*

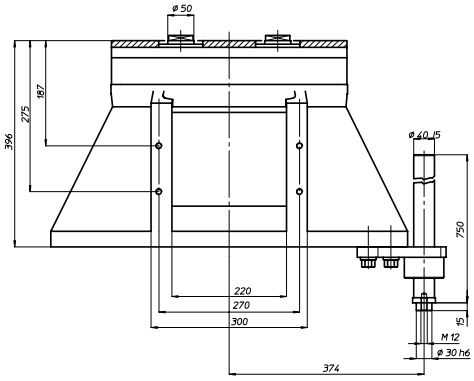


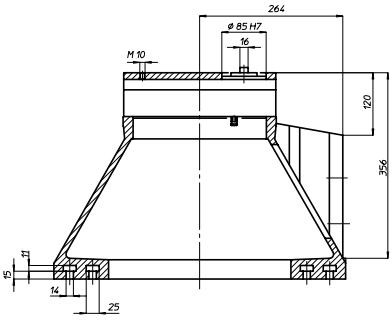
8+8 — N° PRESE DI MOTO / *NR. SPINDLE DRIVES*

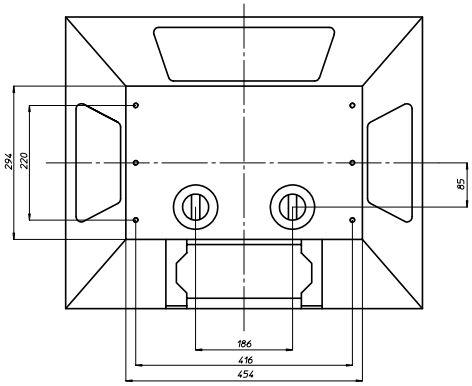
1-1 — RAPPORTO / *RATIO*

140 KG — PESO / *WEIGHT*









CODICE TESTA / *HEAD CODE*

TESTA MODELLO / *HEAD TYPE*: **TRM43**

- 16 — PRESE DI MOTO / *DRIVES*
- R — PRESA DI MOTO ATTACCO RAPIDO / *QUICK DRIVE CONNECTION*
- 2P — N.2 PRESE DI FORZA / *NR.2 CENTRAL DRIVES*

300x440 — AREA DI LAVORO / *WORKING AREA*

TRM73-2P

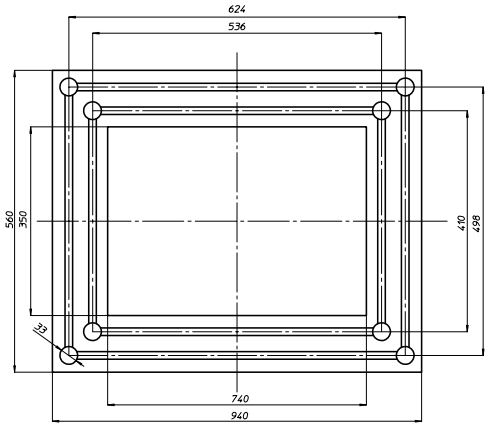
TESTA MULTIPLA A GIUNTI UNIVERSALI • *ADJUSTABLE JOINT MULTISPINDLE HEAD*

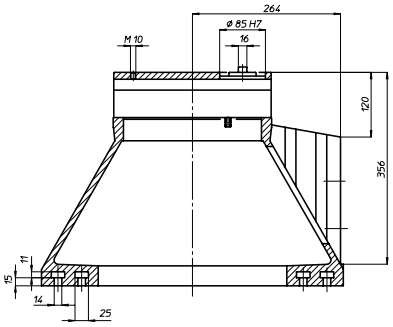
N° PRESE DI MOTO
NR. SPINDLE DRIVES
13+13

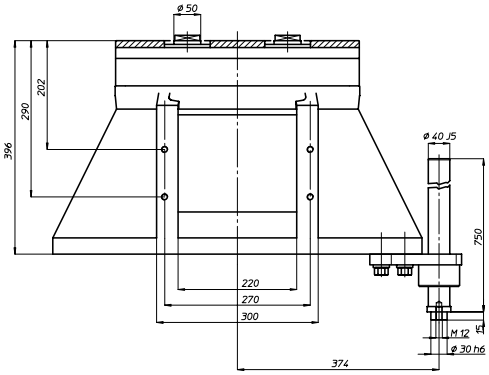
RAPPORTO
RATIO
1-1

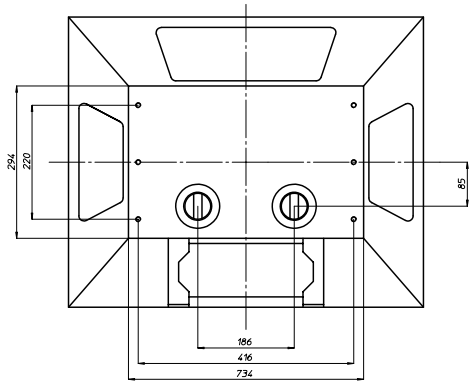
PESO
WEIGHT
210 KG











CODICE TESTA
HEAD CODE

TESTA MODELLO
HEAD TYPE
TRM73

26 — PRESE DI MOTO *DRIVES*

PRESA DI MOTO ATTACCO RAPIDO
QUICK DRIVE CONNECTION
R

2P — N.2 PRESE DI FORZA *NR.2 CENTRAL DRIVES*

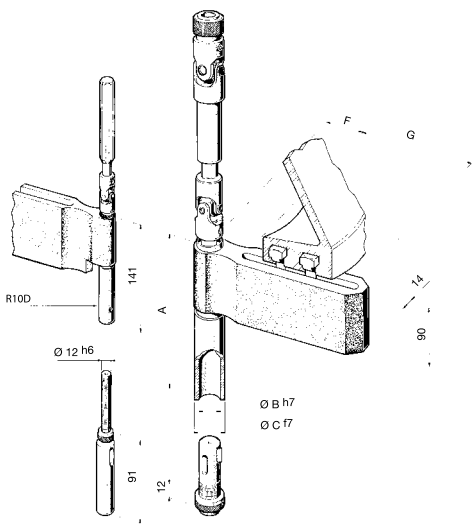
300x700

AREA DI LAVORO
WORKING AREA

SOLO PER TESTE TM-TRM

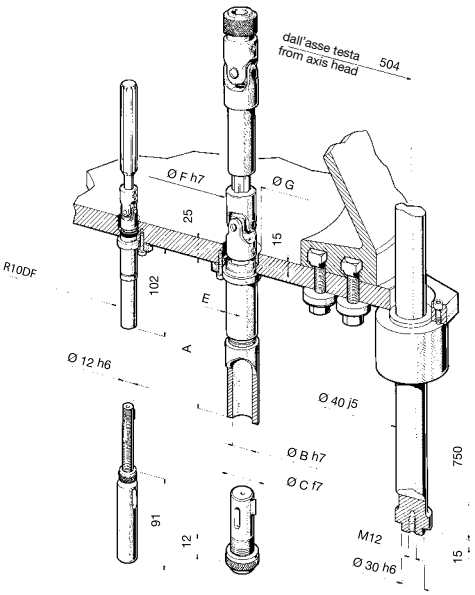
FOR TM-TRM HEADS ONLY

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 / *STILL* R=500 N/MM	8	10	13	16	20	22
GHISA / *CAST IRON*: 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 *WEIGHT*	4,0 KG 4,5 KG	4,7 KG 5,2 KG	5,2 KG 5,7 KG	5,5 KG 6,3 KG	6,6 KG 7,4 KG	8,6 KG 9,5 KG

SU ASTUCCIO PER FLANGIA FISSA *FIXED PLATE SPINDLE*



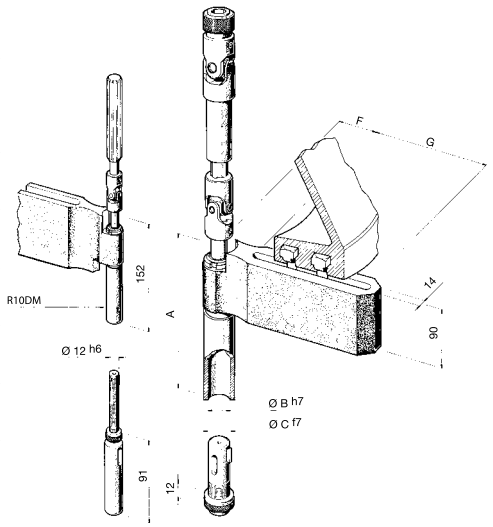
TIPI MANDRINI *SPINDLES TYPE*	10D	12D	15D	18D	22D	25D
CODICE *CODE*	R10DF	R12DF	R15DF	R18DF	R22DF	R25DF
CAPACITÀ FORATURA *DRILLING CAPACITY* ACCIAIO / *STILL* R=500 N/MM	8	10	13	16	20	22
GHISA / *CAST IRON*: GG25	10	12	15	18	22	25
CAPACITÀ MASCHIATURA *TAPPING*	M6	M8	M12	M14	M16	M18
A	102	156	160	169	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 *WEIGHT*	2,0 KG	2,3 KG	2,6 KG	3,4 KG	3,8 KG	5,2 KG

SOLO PER TESTE TM-TRM

FOR TM-TRM HEADS ONLY

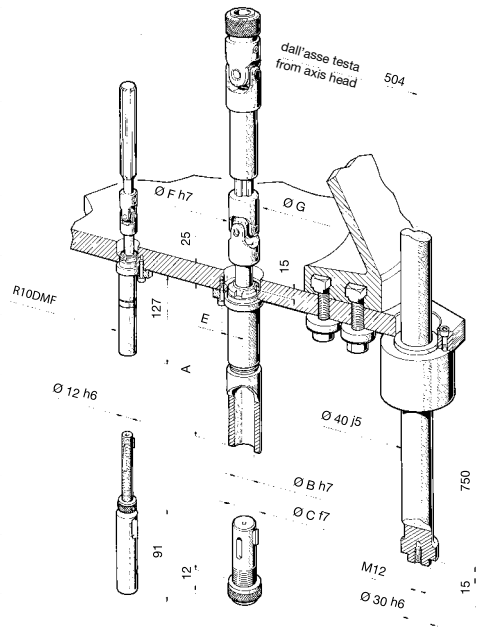
TIPI MANDRINI *SPINDLES TYPE*	10DM	15DM	22DM
CODICE *CODE*	R10DM-S5 R10DM-S6	R15DM-S5 R15DM-S6	R22DM-S5 R22DM-S6
CAPACITÀ MASCHIATURA *TAPPING*	M6	M12	M16
CORSA MASCHIATURA *TAPPING STROKE*	40	40	40
A	152	208	217
ØB H7	12	20	28
ØC F7	20	32	40
F	59	55	55
G	200 270	200 270	200 270
INTERASSE MINIMO *CENTER DISTANCE*	23	32,5	40,5
PESO *WEIGHT*	4,0 KG 4,5 KG	5,2 KG 5,7 KG	6,6 KG 7,4 KG

SU STAFFA
ON ARM



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 SCREW 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 *WEIGHT*	2,0 KG	2,6 KG	3,8 KG

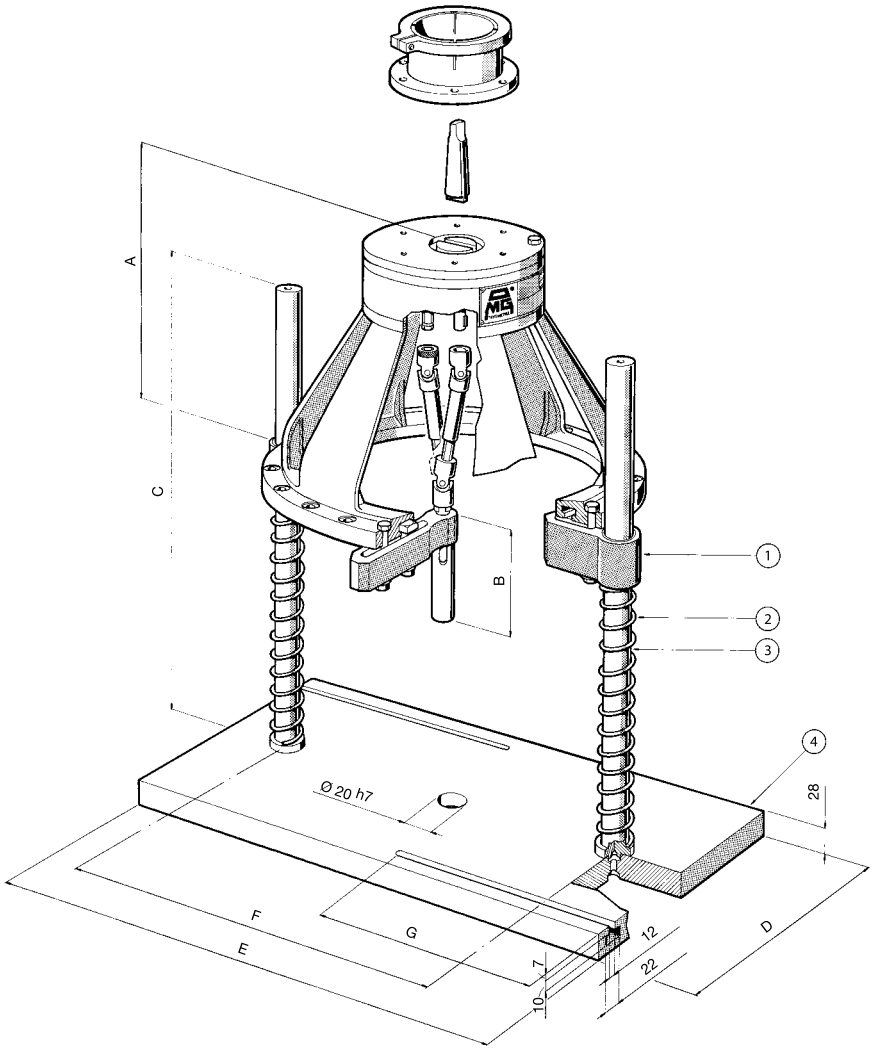
SU ASTUCCIO PER FLANGIA FISSA
FIXED PLATE SPINDLE



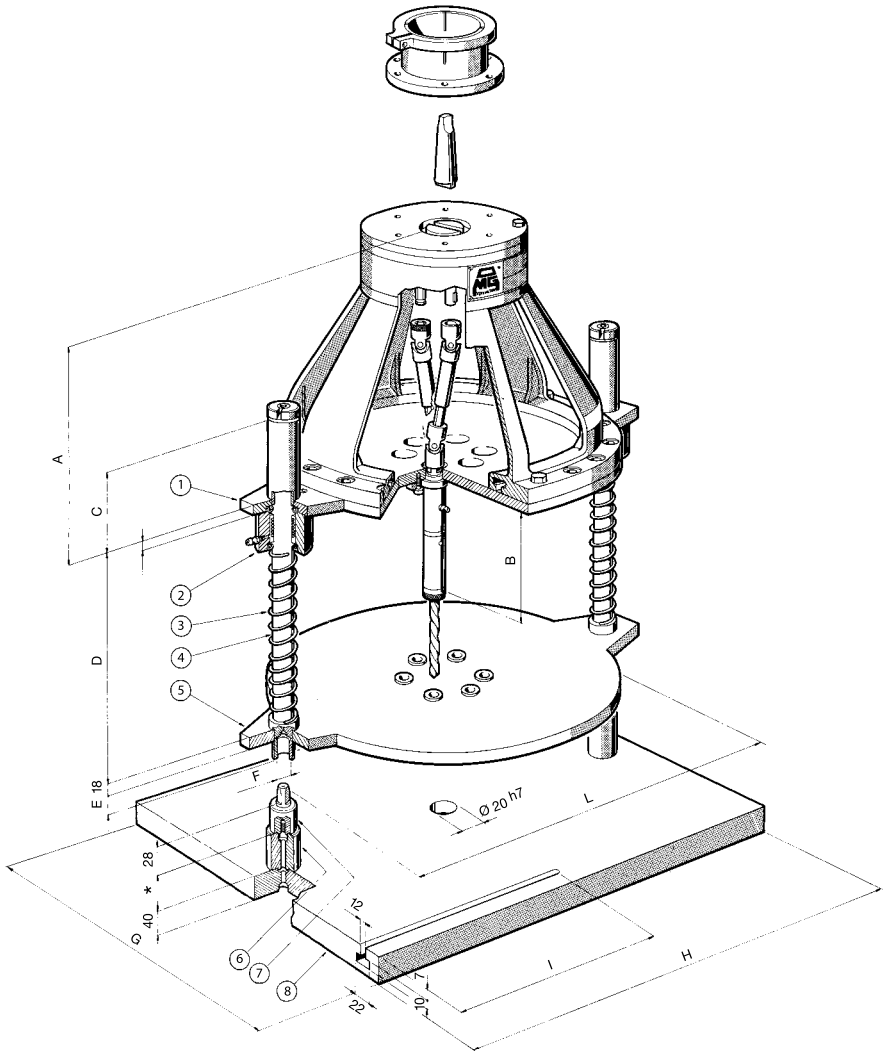
SERIE T-TS-TL-TR

ATTREZZATURE PER TESTE MULTIPLE

MULTISPINDLE HEADS EQUIPMENT



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	185					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										



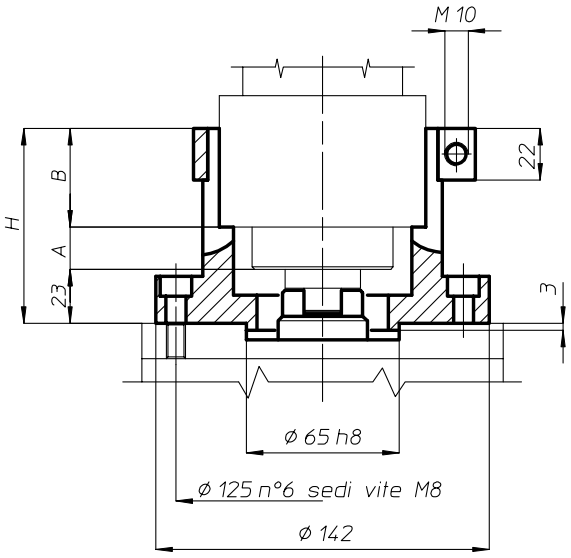
* a richiesta

MODELLO TESTA *HEAD TYPE*	A	B		C	D	E	ØFh7	G	H	I	L	1 FLANGIA FISSA *FIXED PLATE*	2 CARTUCCIA DI GUIDA *GUIDE BUSH*	3 MOLLA *SPRING*	4 COLONNA *COLUMN*	5 MASCHERA *DRILLING JIG*	6 DISTANZIALE *SPACER*	7 PUNTALE *PUSH-ROD*	8 BASE *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																	
TR2/12	290	175																	
TR2/16	290	185							650	350	548	076015				076065			076095
TR5/12	290	175																	
TR5/16	290	185									629	076016				076066			076096

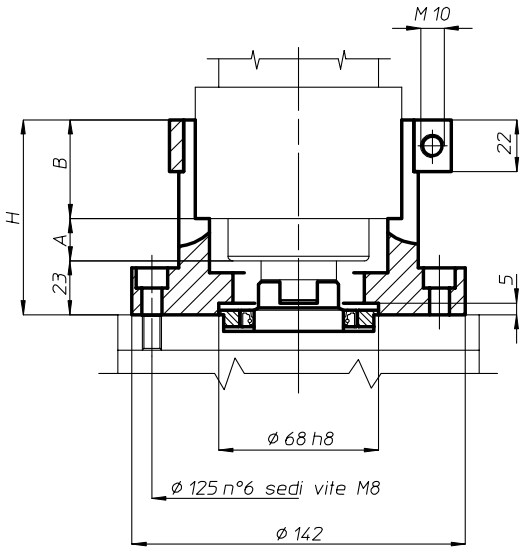
ATTACCO CONO MORSE TRASCINATORE
MORSE TAPER WITH DRIVING DOG

T4 - T7 - T10 - TL20...

SOLO VERSIONE ORIZZONTALE
FOR HORIZONTAL USE ONLY

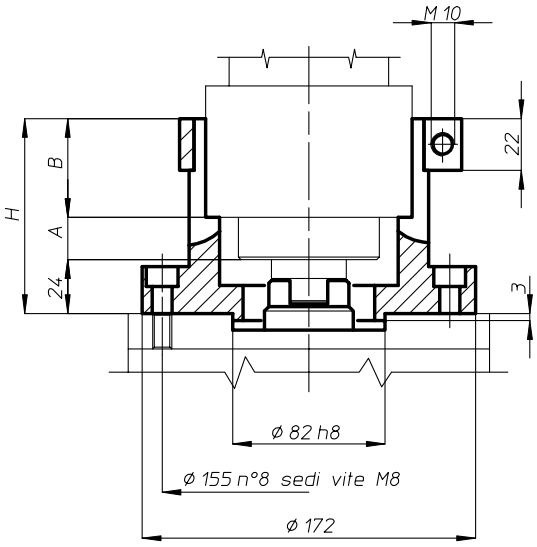


VERSIONE STANDARD
STANDARD VERSION

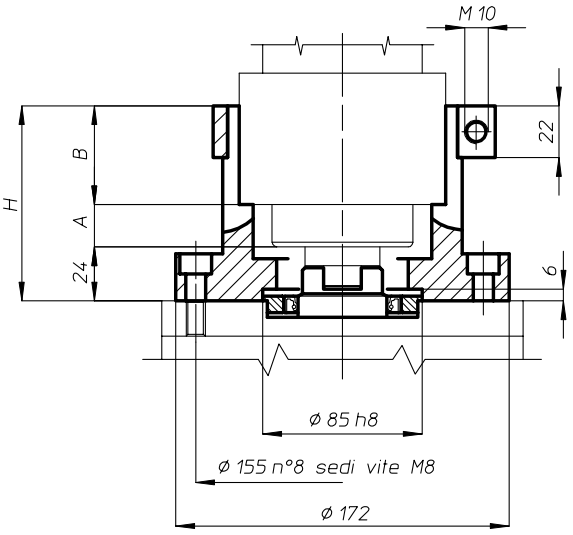


T12 - T15 - T18 - T22 - TL40... - TL60... - TR2... - TR5...

SOLO VERSIONE ORIZZONTALE
FOR HORIZONTAL USE ONLY



VERSIONE STANDARD
STANDARD VERSION



NOTE

NOTES

TESTE MULTIPLE AD ASSI FISSI
FIXED MULTISPINDLE HEADS

SYSTEM MT



SYSTEM TC



SYSTEM TC3



SERIE TFS



SYSTEM MT

TESTE MULTIPLE FLESSIBILI AD ASSI FISSI

MULTISPINDLE HEADS WITH FIXED CENTERS DISTANCE











Il sistema MT si utilizza dove gli interassi e le capacità di torsione sono ridotte. L'interasse minimo realizzabile è mm 10 perché al di sotto di tale misura verrebbero a mancare i requisiti di sicurezza caratteristici dei prodotti O.M.G.. Le realizzazioni MT, generalmente, hanno dimensioni contenute, pochi mandrini (3 o 4), peso ridotto (kg 2) e sono lubrificate con grasso long-life. È possibile eseguire con la medesima testa filettature con passo differente.
Tutta la componentistica, trattata termicamente, ruota interamente su cuscinetti offrendo la possibilità di raggiungere velocità di rotazione di 10.000 giri al minuto. Nonostante le caratteristiche minute, si possono comunque realizzare teste con un ragguardevole numero di mandrini (oltre 20) e con corpi di una certa dimensione.

The MT system is for small centre distances and low torque requirements. The minimum centre distance is 10 mm; below this heads reliability becomes questionable. MT units are normally very compact and with 3 or 4 spindles weigh little - 2 kg for example - and are permanent grease lubricated. Rotating components are hardened and ground, and are carried in anti-friction bearings enabling these heads to run up to 10.000 rpm. In special cases, MT heads are built with large bodies and high numbers of spindles - even in excess of 20.



SYSTEM TC

TESTE MULTIPLE FLESSIBILI AD ASSI FISSI

MULTISPINDLE HEADS WITH FIXED CENTERS DISTANCE

Migliaia di realizzazioni sia per trapani, unità, macchine combinate, centri di lavorazione con cambio automatico dell'utensile sono state costruite con il sistema TC, la serie di media capacità. La sua caratteristica principale sta nell'essere la più grande normalizzazione in materia di teste multiple oggi sul mercato. Corpi testa il lega di alluminio delle più varie forme e dimensioni sono normalizzati. Partendo da un interasse minimo di mm 16 si può realizzare qualsiasi figura il cliente richieda; mandrini con tutti i tipi di attacchi utensili (a pinza DIN 6499, DIN 55058, Komet ABS, DIN 1895, ecc.) ruotano su cuscinetti a rullini selezionati, su cuscinetti a sfere a contatto obliquo di precisione, su cuscinetti a rulli conici, tutti indifferentemente per potere utilizzare qualsiasi tipologia di utensile. I mandrini di maschiatura a patrona partono da un interasse di mm 28. Colonne mobili o fisse per maschiare guida utensili completano l'intera gamma. È permesso inoltre superare abbondantemente la soglia dei 10.000 giri al minuto per ottemperare alle elevate velocità richieste dagli utensili.

Many TC system - medium capacity - heads have been supplied for drilling machines, unit head applications, special machines and machining centres. Outstanding is that this standardised series has become the industries Modular multihead market leader. Head bodies of many sizes and form have been rationalised. With a minimum centre distance of 16 mm holes patterns can be provided for any client need; spindles with all types of tool connection (DIN 6499 collets, DIN 55058, Komet, ABS, DIN 1895, etc.) are carried in combinations of selected needle, precision angular contact ball and taper rolling bearings to suit all tool types. Threading spindles with lead nuts give a minimum centres distance of 28 mm; additionally, fixed and movable columns with bush lates for tool guidance are available when required. When the tolls or work demand. TC series head spindles can be run excess of 10.000 rpm.





SYSTEM TC3

TESTE MULTIPLE FLESSIBILI AD ASSI FISSI

MULTISPINDLE HEADS WITH FIXED CENTERS DISTANCE

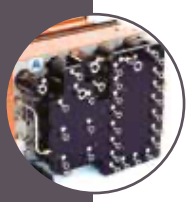


La serie TC3 è l'espressione dell'alta tecnologia O.M.G.. È il sistema di teste utilizzato per trasmettere elevate potenze su grosse unità, rototraslanti, macchine col cambio automatico delle teste. Massicce, solide, dal peso elevato (anche kg 900) non hanno limiti di utilizzo che non siano quelli della macchina utensile.
Il corpo, normalmente in fusione di ghisa sferoidale, racchiude tutto il cinematismo rettificato, con lubrificazione forzata e prssurizzato. Vari tipi di mandrini sono disponibili su questo tipo di teste e tra essi particolarmente indicati sono quelli supportati da cuscinetti a contatto obliquo di precisione adatti ad operazioni di foratura senza guida utensile, alesatura, fresatura; in questo caso all'interno della testa si hanno due tipi di lubrificazione, ad olio per gli ingranaggi elicoidali ad evolvente rettificato e a grasso per tutti i gruppi mandrino. Anche questa serie si può equipaggiare con maschere guida utensili su colonne mobili o fisse, adduttori per refrigerante passanti per il centro dell'utensile.
Molte macchine utensili non potrebbero funzionare senza queste teste multiple e la qualità delle lavorazioni dipende esclusivamente dalla loro precisione, tanto che si potrebbero definire vere e proprie "macchine utensili".

The TC3 series is the expression of O.M.G.'s cutting-edge technology. This system of heads is used for transmitting high powers on large units, rotational-translating, machines with automatic head change. Sturdy, strong, of heavy weight (up to 900 kg) they have no restrictions as regards use excepting those of all machine tools.
The body, normally made of spheroidal cast iron, encloses all the ground kinematic mechanism, with forced and pressurised lubrication. Various types of spindles are available on this type of head and, among these, especially appropriate are those supported by precision oblique contact bearings suitable for drilling operations without tool jigs, boring, milling; in this case, inside the head are two types of lubrication - oil for the helical gears with ground involute and grease for all the spindle units. This series can also be equipped with tool jigs on moving or fixed columns, coolant feeders passing through the centre of the tool.
Many machine tools could not operate without these multiple heads and the quality of machining operations depends on their precision alone, to the extent that they could be considered "machine tools" in their own right.









TFS: Testa Fissa Speciale. Speciale perché la sua progettazione è unica in quanto nasce per soddisfare richieste specifiche e particolari per le quali non può essere utilizzato nessuno degli standard già esistenti.
A differenza delle altre serie speciali MT-TC-TC3 che siamo riusciti a standardizzare e quindi a redigere delle tabelle tecniche, per la serie TFS possiamo presentarvi solo immagini, in quanto la loro unicità non ci permette di definire alcuna scheda tecnica, se non una specifica per ogni testa.
In breve:
1- non hanno limiti di dimensioni perché dipendono dalla macchina su cui verranno applicate;
2-possono trasmettere potenze fino e oltre il limite della macchina stessa;
3-possono equipaggiare una qualsiasi macchina utensile o far parte di applicazioni particolari.
Tutta la testa ed i suoi componenti sono studiati propriamente per soddisfare le caratteristiche di lavorazione che il pezzo, gli utensili e il cliente richiede.

TFS: Special Fixed Head. Special because of its unique design, intended to cater for specific requirements and parts for which no existing standards can be used.
Unlike the other special series MT-TC-TC3 which we have managed to standardise and for which we have consequently drawn up technical charts, for the TFS series, we are only able to provide you with images because their uniqueness makes it impossible to define any technical sheet, except a specific one for each head.
In short:
1- there are no dimensional limits because these depend on the machine on which they are to be fitted;
2-they can transmit powers up to and beyond the limit of the machine itself;
3-they can equip any machine tool or become part of special applications.
The entire head and its component parts have been designed to satisfy the machining characteristics that the piece, the tools and the customer require.

SERIES TFS

TESTE FISSE SPECIALI

SPECIAL FIXED HEADS







MT 05599

Testa multipla per foratura corpo rubinetto. Applicazione su tornio. Peso Kg 4,8.

Multispindle head for tap's body drilling on turning centre. Weight Kg 4,8.





MT 38098

Testa multipla per rivettatura componenti in plastica. Peso Kg 22.

Rivet multispindle head for plastic components. Weight Kg 22.

MT 22604

Testa multipla per foratura su corpo pompa. Applicazione su torretta a revolver. Peso Kg 11,5.

Multispindle head for pump's body drilling on turret head. Weight Kg 11,5.





MT 38205

Testa multipla di maschiatura con compensazione a trazione. Peso Kg 16,5.

Multispindle tapping head with tapping compensation. Weight Kg 16,5.



MT 09305

Testa multipla per foratura su valvole oleodinamiche. Applicazione su centro di lavoro con ATC. Peso Kg 19.

Multispindle head for hydraulic control valves drilling on ATC machining centre. Weight Kg 19.



TC 15102

Testa di foratura su ghisa.
Applicazione su tornio. Peso Kg 47.

Drilling multispindle head on cast iron for turning centre. Weight Kg 47.



TC 06694

Testa di foratura su alluminio per centro di lavoro con ATC.
Peso Kg 33,5.

Drilling multispindle head on aluninium for ATC. Weight Kg 33,5.



TC 40604

Testa di foratura su alluminio, punte in metallo duro, passaggio refrigerante centro utensile a 50 Bar, 9500 giri/min. Peso Kg 26.

Drilling multispindle head on aluninium, hard metal tools, coolant through the centre tool at 50 Bar, 9500 Rpm. Weight Kg 26.



TC 13006

Testa multipla per lavorazione testata motore a scoppio. Peso Kg 8,5.

Multispindle head for working internal combustion engine. Weight Kg 8,5.

TC 34706

Testa multipla per foratura ad alta velocità con circolazione liquido per stabilizzazione temperatura. Peso Kg 9.

High speed multispindle head with coolant for temperature control. Weight Kg 9.





TC 38204

Testa multipla di spazzolatura con doppia rotazione: testa e mandrini. Peso Kg 224.

Brushing multispindle head with double rotation: body and spindles. Weight Kg 224.



TC3 43889

Testa di maschiatura equipaggiata di maschiatori con controllo rottura utensile a radiofrequenza. Peso Kg 69.

Tapping head equipped with tapping spindles with broken tool control device by remote control. Weight Kg 69.





TC3 33391

Testa di maschiatura a patrona di componente in ghisa per motore agricolo. Peso Kg 450.

Lead screw tapping head for tractor engine. Weight Kg 450.



TC3 35602

Testa di alesatura e smussatura con utensile combinato su cerchi ruota in acciaio per autotrazione. Peso Kg 285.

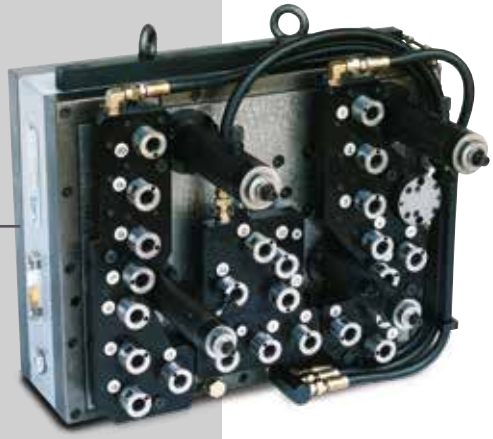
Boring and chamfering head with combined tools on truck's steel rim. Weight Kg 285.



TC3 35205

Testa di foratura f25 con passaggio refrigerante per centro utensile a 50 Bar su componenti per desalatori. Peso Kg 322.

Drilling multispindle head f25 with coolant through the centre tool at 50 Bar for desalinators. Weight Kg 322.



TC3 10191

Testa di foratura basamento motore di autoveicolo. Peso Kg 540.

Drilling head for car engine. Weight Kg 540.



TSF 38906

Testa di fresatura per biella in acciaio. Peso Kg 72,5.

Milling head for steel connecting rod. Weight Kg 72,5.



TSF 34102

Testa di fresatura pendolare a 24°. Peso Kg 25,5.

Testa di fresatura pendolare a 24°. Peso Kg 25,5.



TSF 06806

Testa di foratura con movimento assiale mandrino. Peso Kg 15.

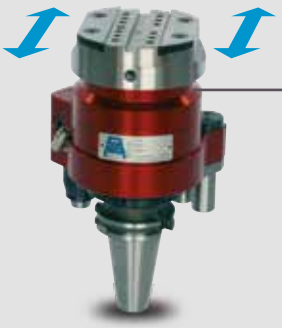
Drilling head with axial spindle movement weight. Weight Kg 15.

TSF 30605

Testa di foratura su 4 lati di componente oleodinamico. Peso Kg 11.

Drilling head on 4 sides of hydraulic components. Weight Kg 11.





TSF 21704

Testa con slitta movimentata idraulicamente. Peso Kg 6,5.

Head equipped with hydraulic slide. Weight Kg 6,5.



TSF 36805

Testa di lavorazione facce di motore automobile. Peso Kg 291.

Multispindle head for working on different car engine faces. Weight Kg 291.