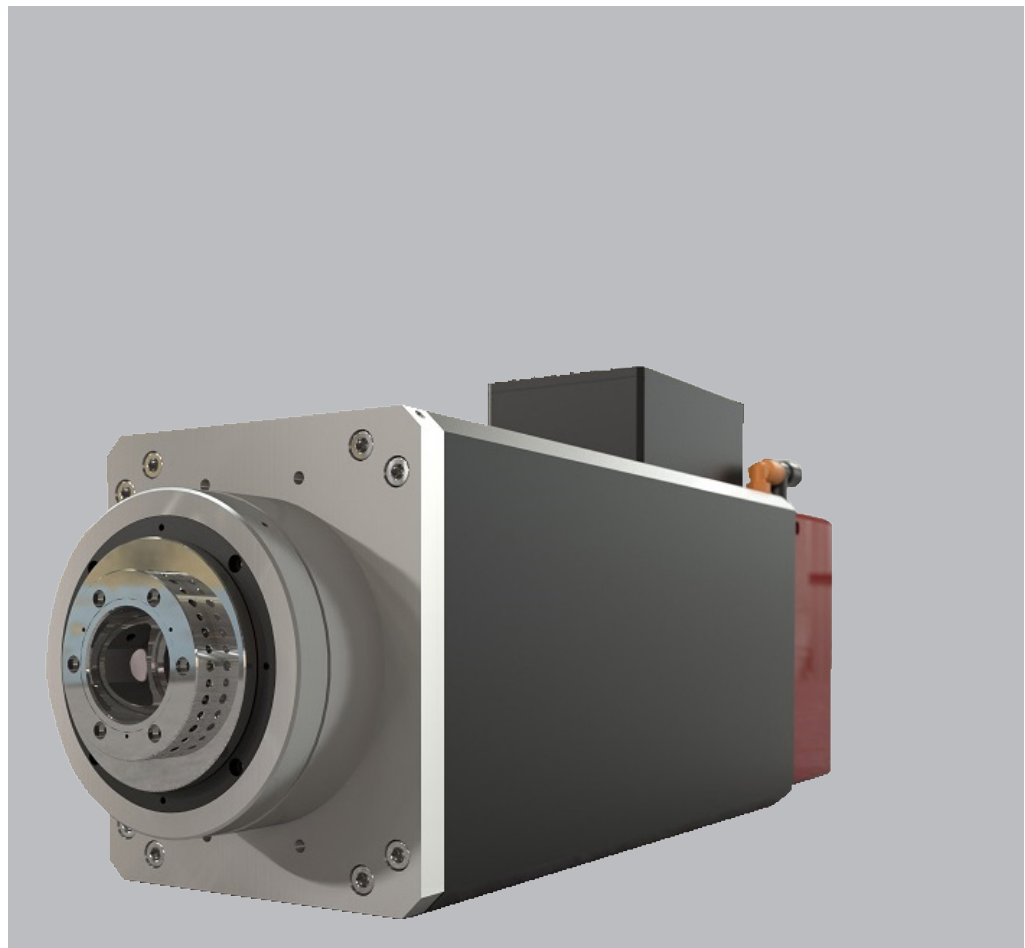


ELTE TMA



Brd. Klee er dansk importør og forhandler af Elte højfrekvensmotorer til værktøjsindustrien. Højfrekvensmotorer kaldes også højhastighedsmotorer eller spindelmotorer.

Eltes motorer er designet og udviklet til brug i træbearbejdnings-, plast-, letmetal-, ædelmetal- og glasindustrien. De anvendes i CNC- og træbearbejdningsmaskiner til fræsning, boring og slibning m.v. og er beregnet til både aksial og radial belastning.

Elte er grundlagt i 1978 og producerer alle motorer på egne fabrikker i Italien, hvor man også har egen udviklings- og designafdeling. Test pågår gennem alle led i produktionen for at sikre høj kvalitet. Test inkluderer tolerancer, vibrationer og afbalancering. Elte er selvfølgelig ISO9001certificeret. Afslutningsvis udføres drifttest på alle motorer inden frigivelse til forsendelse.

På forespørgsel kan alle motorer leveres med testcertifikat.

A guarantee of quality

The TÜV Italy ISO 9001 certificate is a valuable ally for Elte Srl.




Elte Srl carries out compliance verification on all its products and machinery.



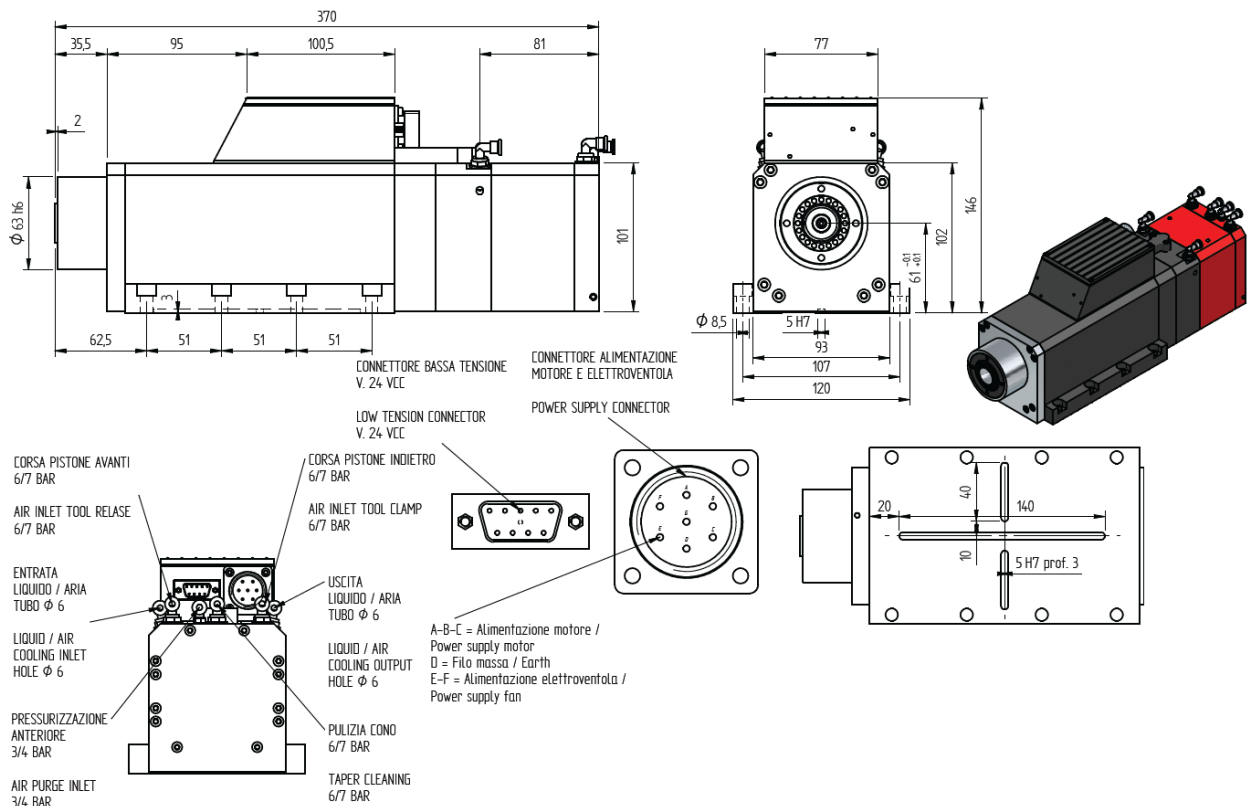
UNI EN 12100-1:2005 UNI EN 12100-2:2005 CEI EN 60034-7
 CEI EN 60034-9
 EN 55011
 CEI EN 61000-6-4:2002 CEI EN 61000-6-2:2000

TMA AUTOMAT. TOOL CHANGER LIQUID/AIR TMA3-HSKE25

| Type | VOLTAGE [Volt] | FREQUENCY [Hz] | RPM | DELIVERED POWER [Kw] | ABSORPTION [Amp] | Cos j | WEIGHT [Kg] |
|----------------------------------|----------------|----------------|-------------|----------------------|------------------|-------|-------------|
| TMA3 12/2 HSK E25 compressed air | 350 | 200/300 | 12000/18000 | 1.8 | 4.9 | 0.83 | 12 |
| TMA3 12/2 HSK E25 liquid | 350 | 200/300 | 12000/18000 | 2.4 | 6.1 | 0.83 | 12 |
| TMA3 12/2 HSK E25 compressed air | 350 | 300/400 | 18000/24000 | 1.8 | 4.7 | 0.83 | 12 |
| TMA3 12/2 HSK E25 liquid | 350 | 300/400 | 18000/24000 | 2.4 | 6.1 | 0.83 | 12 |
| TMA3 12/2 HSK E25 compressed air | 350 | 400 | 24000 | 2.2 | 5.8 | 0.83 | 12 |
| TMA3 12/2 HSK E25 liquid | 350 | 400 | 24000 | 2.6 | 6.5 | 0.83 | 12 |

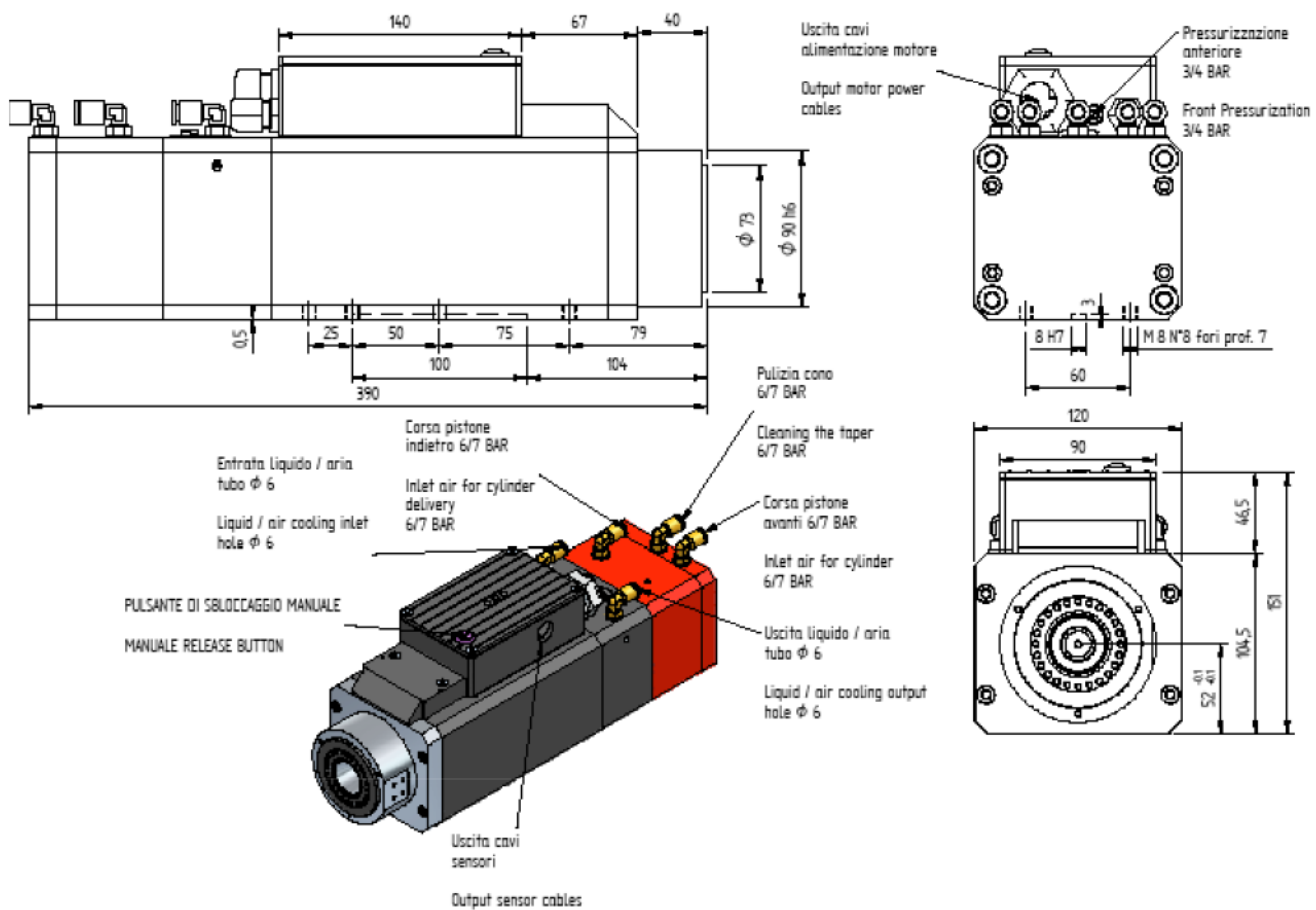
TMA AUTOMAT. TOOL CHANGER LIQUID/AIR TMA3ISO20

| Type | VOLTAGE [Volt] | FREQUENCY [Hz] | RPM | DELIVERED POWER [Kw] | ABSORPTION [Amp] | Cos j | WEIGHT [Kg] |
|--------------------------------|----------------|----------------|-------------|----------------------|------------------|-------|-------------|
| TMA3 12/2 ISO20 compressed air | 350 | 200/300 | 12000/18000 | 1.8 | 4.9 | 0.83 | 12 |
| TMA3 12/2 ISO20 liquid | 350 | 200/300 | 12000/18000 | 2.4 | 6.1 | 0.83 | 12 |
| TMA3 12/2 ISO20 compressed air | 350 | 300/400 | 18000/24000 | 1.8 | 4.7 | 0.83 | 12 |
| TMA3 12/2 ISO20 liquid | 350 | 300/400 | 18000/24000 | 2.4 | 6.1 | 0.83 | 12 |
| TMA3 12/2 ISO20 compressed air | 350 | 400 | 24000 | 2.2 | 5.8 | 0.83 | 12 |
| TMA3 12/2 ISO20 liquid | 350 | 400 | 24000 | 2.6 | 6.5 | 0.83 | 12 |



TMA AUTOMAT. TOOL CHANGER LIQUID/AIR TMA4ISO30

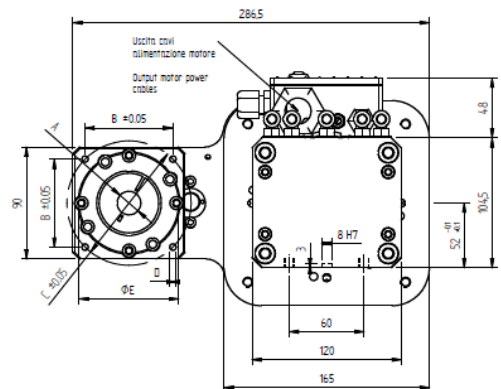
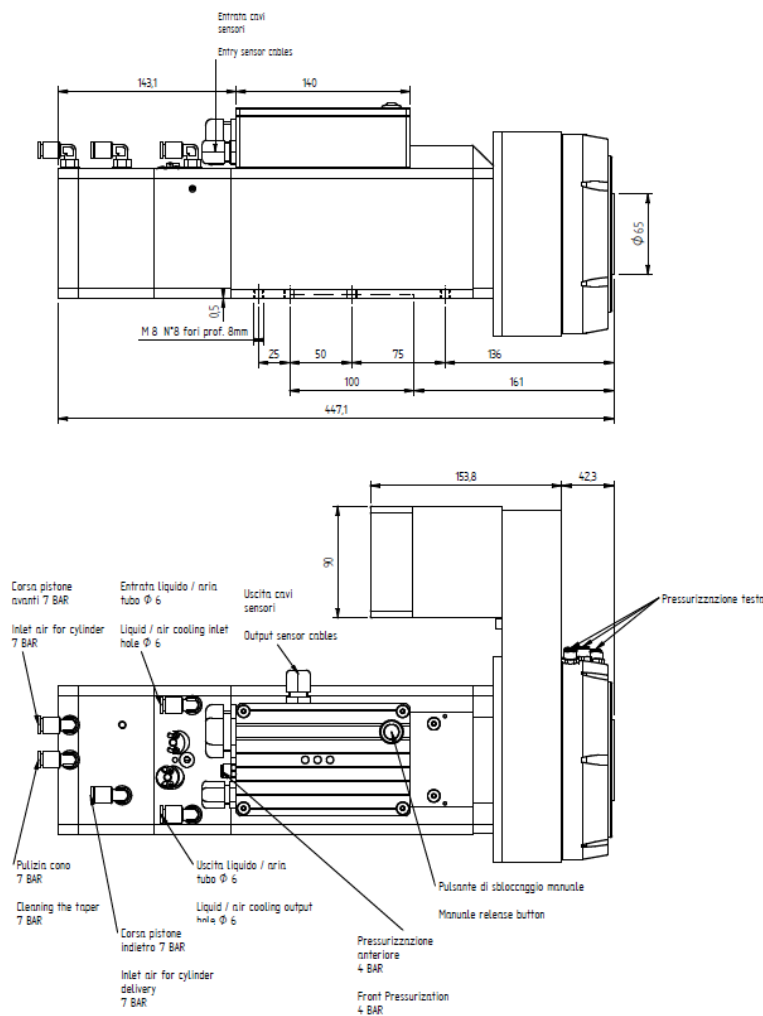
| Type | VOLTAGE [Volt] | FREQUENCY [Hz] | RPM | DELIVERED POWER [Kw] | ABSORPTION [Amp] | Cos j | WEIGHT [Kg] |
|--------------------------------|----------------|----------------|-------------|----------------------|------------------|-------|-------------|
| TMA4 10/2 ISO30 compressed air | 350 | 200/300 | 12000/18000 | 3.6 | 8.6 | 0.82 | 17 |
| ISO30 liquid | 350 | 200/300 | 12000/18000 | 4.5 | 10.4 | 0.84 | 17 |
| TMA4 10/2 ISO30 compressed air | 350 | 300/400 | 18000/24000 | 3.6 | 8.6 | 0.82 | 17 |
| ISO30 liquid | 350 | 300/400 | 18000/24000 | 4.5 | 10.4 | 0.84 | 17 |



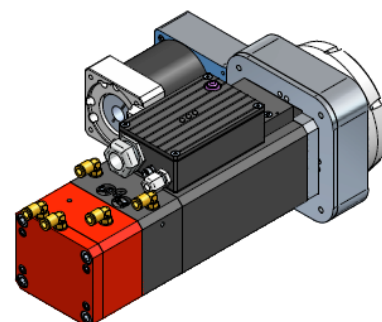
TMA AUTOMAT. TOOL CHANGER LIQUID/AIR TMA4ISO30 - C AXIS

| Type | VOLTAGE [Volt] | FREQUENCY [Hz] | RPM | DELIVERED POWER [Kw] | ABSORPTION [Amp] | Cos j | WEIGHT [Kg] |
|-----------------------------------|----------------|----------------|-------------|----------------------|------------------|-------|-------------|
| TMA4 CU 10/2 ISO30 compressed air | 350 | 200/300 | 12000/18000 | 3.6 | 8.6 | 0.82 | 17/12* |
| TMA4 CU 10/2 ISO30 liquid | 350 | 200/300 | 12000/18000 | 4.5 | 10.4 | 0.84 | 17/12* |
| TMA4 CU 10/2 ISO30 compressed air | 350 | 300/400 | 18000/24000 | 3.6 | 8.6 | 0.82 | 17/12* |
| TMA4 CU 10/2 ISO30 liquid | 350 | 300/400 | 18000/24000 | 4.5 | 10.4 | 0.84 | 17/12* |

*) Weight with C axis = 12 Kg

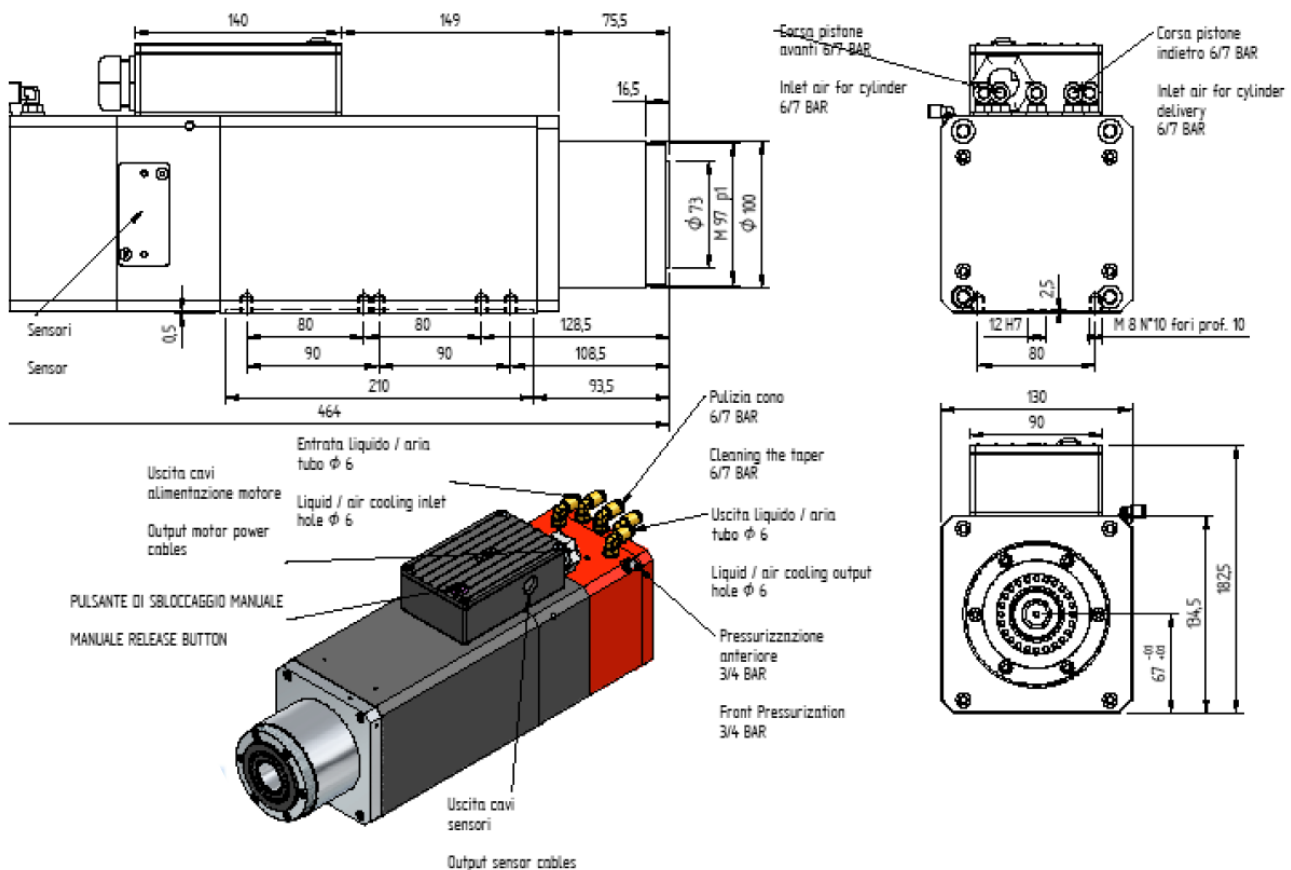


| TIPO | A | B | C | D | E |
|-----------------|----|-------|-----|---------|----|
| SERVOMOTORE Ø14 | 14 | 163 | 70 | M5 x 12 | 50 |
| SERVOMOTORE Ø19 | 19 | 70,71 | 100 | M6 x 15 | 80 |



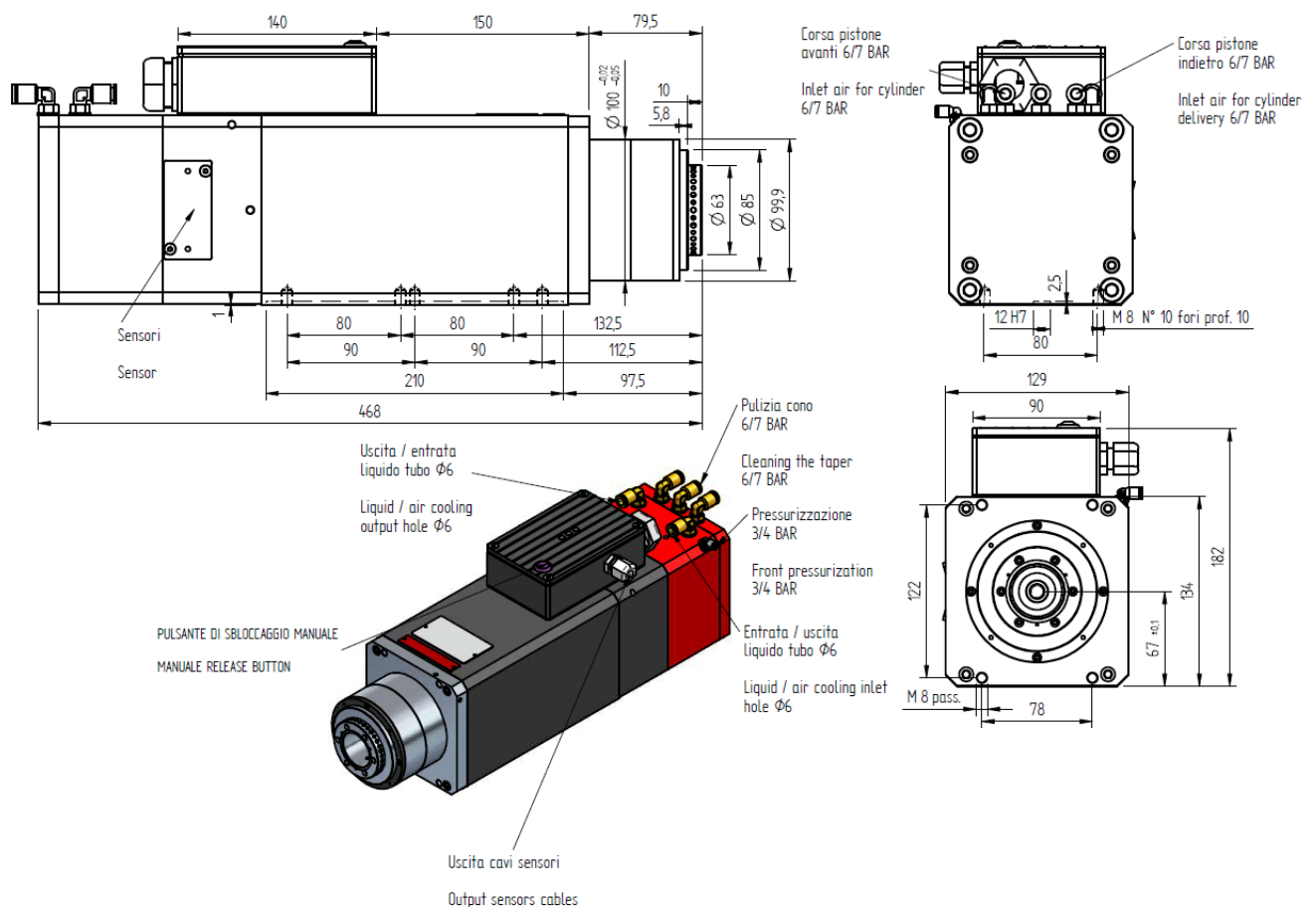
TMA AUTOMAT. TOOL CHANGER LIQUID/AIR TMA5ISO30

| Type | VOLTAGE [Volt] | FREQUENCY [Hz] | RPM | DELIVERED POWER [Kw] | ABSORPTION [Amp] | Cos j | WEIGHT [Kg] |
|--------------------------------|----------------|----------------|-------------|----------------------|------------------|-------|-------------|
| TMA5 14/2 ISO30 compressed air | 350 | 200/300 | 12000/18000 | 7 | 16 | 0.85 | 25 |
| TMA5 14/2 ISO30 liquid | 350 | 200/300 | 12000/18000 | 7.5 | 18 | 0.85 | 25 |
| TMA5 14/2 ISO30 compressed air | 350 | 300/400 | 18000/24000 | 7 | 16 | 0.82 | 25 |
| TMA5 14/2 ISO30 liquid | 350 | 300/400 | 18000/24000 | 8.5 | 19.4 | 0.82 | 25 |



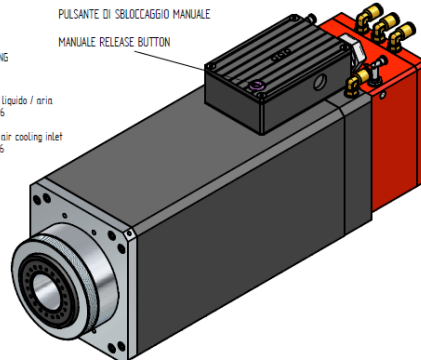
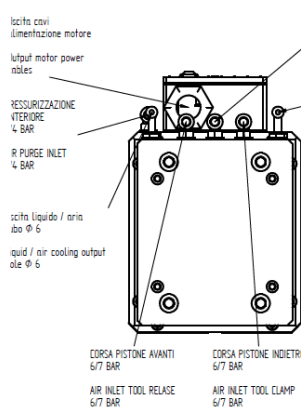
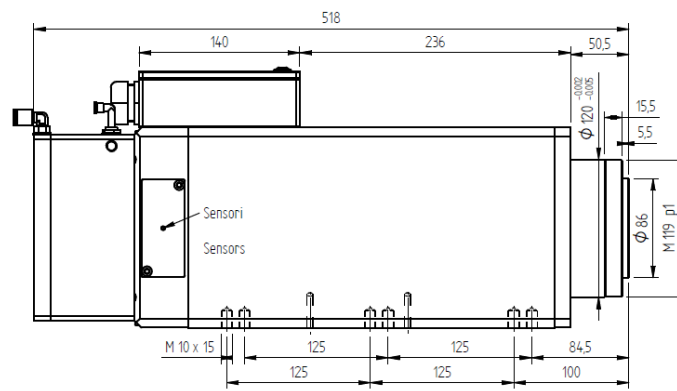
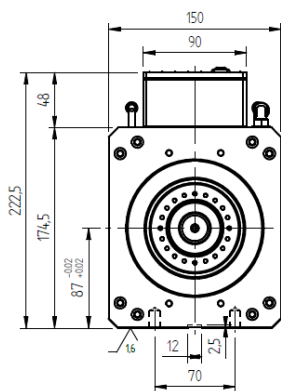
TMA AUTOMAT. TOOL CHANGER LIQUID/AIR TMA5HSKF63

| Type | VOLTAGE [Volt] | FREQUENCY [Hz] | RPM | DELIVERED POWER [Kw] | ABSORPTION [Amp] | Cos j | WEIGHT [Kg] |
|---------------------------------|----------------|----------------|-------------|----------------------|------------------|-------|-------------|
| TMA5 13/4 HSKF63 compressed air | 350 | 400/600 | 12000/18000 | 6 | 16.6 | 0.72 | 25 |
| TMA5 13/4 HSKF63 liquid | 350 | 400/600 | 12000/18000 | 7.5 | 19.7 | 0.72 | 25 |
| TMA5 14/2 HSKF63 compressed air | 350 | 200/300 | 12000/18000 | 7 | 16.0 | 0.85 | 25 |
| TMA5 14/2 HSKF63 liquid | 350 | 200/300 | 12000/18000 | 7.5 | 18.0 | 0.85 | 25 |

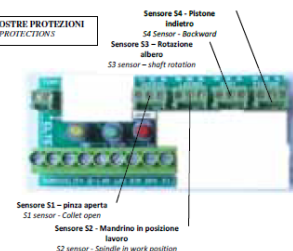


TMA AUTOMAT. TOOL CHANGER LIQUID/AIR TMA6ISO40

| Type | VOLTAGE [Volt] | FREQUENCY [Hz] | RPM | DELIVERED POWER [Kw] | ABSORPTION [Amp] | Cos j | WEIGHT [Kg] |
|--------------------------------|----------------|----------------|-------------|----------------------|------------------|-------|-------------|
| TMA6 17/2 ISO40 compressed air | 350 | 200/300 | 12000/18000 | 11.0 | 26.0 | 0.85 | 42 |
| TMA6 17/2 ISO40 liquid | 350 | 200/300 | 12000/18000 | 12.5 | 28.5 | 0.85 | 42 |



LE NOSTRE PROTEZIONI
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TMA AUTOMAT. TOOL CHANGER LIQUID/AIR TMA6-HSKF63

| Type | VOLTAGE [Volt] | FREQUENCY [Hz] | RPM | DELIVERED POWER [Kw] | ABSORPTION [Amp] | Cos j | WEIGHT [Kg] |
|----------------------------------|----------------|----------------|-------------|----------------------|------------------|-------|-------------|
| TMA6 17/2 HSK F63 compressed air | 350 | 200/300 | 12000/18000 | 11.0 | 26.0 | 0.85 | 44 |
| TMA6 17/2 HSK F63 liquid | 350 | 200/300 | 12000/18000 | 12.5 | 28.5 | 0.85 | 44 |

