## technical <br> sheet <br> Tirak hoists X-300P and X-500P series

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The new Tirak X-300P and X-500P hoists compliment the standard T-500P and T-1000P units, which are designed for manriding applications.

Lighter than the T-series, the X-series are most suited for bosun's chairs, inspection harnesses, one-man cradles and light suspended platforms.

The wire rope passes around a single drive pulley. The gripping of the wire rope around the pulley is achieved by a set of rollers, operated by a compression spring (see the drawing opposite).

|  | cap. for manriding 1 | speed | motor |  |  | $\begin{array}{\|c\|} \hline \text { wire } \\ \text { rope } \\ \varnothing 3 \end{array}$ | weight of unit | dimensions |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | operating |  |  | overal |  |  | Tirak mechanism |  |  |
|  |  |  | type 2 | cap. | factor |  |  | a | b | c | d | e | f |
| modèle | $\begin{gathered} \text { lbs. } \\ \text { (daN/kg) } \end{gathered}$ | $\begin{gathered} \hline \mathrm{ft} . / \mathrm{mn} \\ (\mathrm{~m} / \mathrm{mn}) \end{gathered}$ | - | kW | \% | $\begin{gathered} \text { in. } \\ (\mathrm{mm}) \end{gathered}$ | lbs. (kg) | $\begin{gathered} \text { in. } \\ (\mathrm{mm}) \end{gathered}$ | $\begin{aligned} & \text { in. } \\ & (\mathrm{mm}) \end{aligned}$ | $\begin{aligned} & \text { in. } \\ & (\mathrm{mm}) \end{aligned}$ | $\begin{aligned} & \text { in. } \\ & (\mathrm{mm}) \end{aligned}$ | $\begin{gathered} \text { in. } \\ (\mathrm{mm}) \end{gathered}$ | $\begin{gathered} \text { in. } \\ (\mathrm{mm}) \end{gathered}$ |
| X-300P | $\begin{gathered} \hline 661 \\ (300) \end{gathered}$ | $\begin{aligned} & 27.9 \\ & (8.5) \end{aligned}$ | T | 0.45 | 100 | $5 / 16$ (8) | $\begin{gathered} 55 \\ (25) \end{gathered}$ | $\begin{aligned} & 153 / 4 \\ & (400) \end{aligned}$ | $\begin{gathered} 2027 / 32 \\ (250) \end{gathered}$ | $\begin{gathered} 825 / 64 \\ (213) \end{gathered}$ | $\begin{gathered} 117 / 32 \\ (285) \end{gathered}$ | $\begin{gathered} 927 / 32 \\ (250) \end{gathered}$ | $\begin{gathered} 223 / 64 \\ (60) \end{gathered}$ |
| X-302P X-301P |  | $\begin{aligned} & 58.8 \\ & (17) \\ & 27.9 \\ & (8.5) \end{aligned}$ | T M | 0.9 0.45 |  | $5 / 16$ (8) $5 / 6$ <br> (8) | $\begin{gathered} 55 \\ (25) \\ 57 \\ (26) \\ \hline \end{gathered}$ | 16 15/16 (430) |  |  |  |  |  |
| XA-300P | $\begin{gathered} \hline 661 \\ (300) \end{gathered}$ | $\begin{aligned} & 13-30 \\ & (4-9) \end{aligned}$ | A | - | 100 | $5 / 16$ (8) | $\begin{gathered} 44 \\ (20) \end{gathered}$ | $\begin{gathered} 1325 / 32 \\ (350) \end{gathered}$ | $\begin{gathered} 11 \text { 13/16 } \\ (300) \end{gathered}$ | $\begin{gathered} \hline 825 / 64 \\ (213) \end{gathered}$ | $\begin{gathered} 117 / 32 \\ (285) \end{gathered}$ | $\begin{gathered} 927 / 32 \\ (250) \end{gathered}$ | $\begin{gathered} 223 / 64 \\ (60) \end{gathered}$ |
| X-500P | $\begin{aligned} & 1,102 \\ & (500) \end{aligned}$ | $\begin{aligned} & 30 \\ & \text { (9) } \end{aligned}$ | T | 0.9 | 100 | $5 / 16$ (8) | $\begin{gathered} 89 \\ (39) \end{gathered}$ | $\begin{gathered} 193 / 32 \\ (485) \end{gathered}$ | $\begin{gathered} 1111 / 16 \\ (297) \end{gathered}$ | $\begin{gathered} 927 / 32 \\ (250) \end{gathered}$ | $\begin{gathered} 149 / 16 \\ (370) \end{gathered}$ | $\begin{gathered} 1111 / 16 \\ (297) \end{gathered}$ | $\begin{gathered} 223 / 64 \\ (60) \end{gathered}$ |
| X-502P |  | $\begin{gathered} 59 \\ (18) \end{gathered}$ | T | 1.8 |  | $5 / 16$ (8) | $\begin{gathered} 89 \\ (39) \end{gathered}$ | $\begin{aligned} & 191 / 2 \\ & (495) \end{aligned}$ |  |  |  |  |  |
| X-501P |  | $\begin{aligned} & 30 \\ & \text { (9) } \end{aligned}$ | M | 0.9 |  | $5 / 16$ (8) | $\begin{gathered} 95 \\ (43) \end{gathered}$ | $\begin{gathered} 2015 / 32 \\ (520) \end{gathered}$ |  |  |  |  |  |
| X-520P |  | $30$ <br> (9) | T | 0.9 |  | $\begin{gathered} 23 / 64 \\ (9) \end{gathered}$ | $\begin{gathered} 89 \\ (39) \end{gathered}$ | $\begin{gathered} 193 / 32 \\ (485) \end{gathered}$ |  |  |  |  |  |
| X-522P |  | $\begin{gathered} 59 \\ (18) \end{gathered}$ | T | 1.8 |  | $\begin{gathered} 23 / 64 \\ (9) \end{gathered}$ | $\begin{gathered} 89 \\ (39) \end{gathered}$ | $\begin{aligned} & 191 / 2 \\ & (495) \end{aligned}$ |  |  |  |  |  |
| X-521P |  | $\begin{aligned} & 30 \\ & \text { (9) } \\ & \hline \end{aligned}$ | M | 0.9 |  | $\begin{gathered} 23 / 64 \\ (9) \\ \hline \end{gathered}$ | $\begin{gathered} 89 \\ (43) \\ \hline \end{gathered}$ | $\begin{gathered} 2015 / 32 \\ (520) \\ \hline \end{gathered}$ |  |  |  |  |  |
| XA-500P | $\begin{aligned} & 1,102 \\ & (500) \end{aligned}$ | $\begin{aligned} & 13-30 \\ & (4-9) \end{aligned}$ | A | - | 100 | $\begin{gathered} 5 / 16 \\ (8) \end{gathered}$ | $\begin{gathered} 77 \\ (35) \end{gathered}$ | $\begin{aligned} & 153 / 4 \\ & (400) \end{aligned}$ | $\begin{gathered} 1111 / 16 \\ (297) \end{gathered}$ | $\begin{gathered} 927 / 32 \\ (250) \end{gathered}$ | $\begin{gathered} 149 / 16 \\ (370) \end{gathered}$ | $\begin{gathered} 1111 / 16 \\ (297) \end{gathered}$ | $\begin{gathered} 2 \text { 23/64 } \\ (60) \end{gathered}$ |

1) The capacities indicated for manriding are calculated on the effective breaking strength of the wire rope (safety factor of 6 ). For countries which require higher safety standards, the manriding capacity should be calculated on this basis, with the knowledge that the effective breaking stregth is $4,800 \mathrm{~kg}$ for the $\varnothing 8 \mathrm{~mm}$ and $6,800 \mathrm{~kg}$ for the $\varnothing 9 \mathrm{~mm}$ wire rope.
2) $\mathrm{T}=3$-phase $220 / 380 \mathrm{~V}, 50 \mathrm{~Hz}, 1,500 \mathrm{rpm}(9 \mathrm{~m} / \mathrm{mn})$ or $3,000 \mathrm{rpm}(18 \mathrm{~m} / \mathrm{mn})$.
$M=$ Single phase $220 \mathrm{~V}, 50 \mathrm{~Hz}, 1,500 \mathrm{rpm}$.
Other voltages are available.
$\mathrm{A}=$ pneumatic motor, 6 bar air pressure. Air consumption: $0.75 \mathrm{~m}^{3} / \mathrm{mn}$ (XA-300P) and $1.5 \mathrm{~m}^{3} / \mathrm{mn}$ (XA-500P).
3) Effective breaking strain:
for $\varnothing 8 \mathrm{~mm}$ wire rope $=4,800 \mathrm{~kg}$;
for $\varnothing 9 \mathrm{~mm}$ wire rope $=6,800 \mathrm{~kg}$.

