Size 204 - 1 ton - 10 kN

XTP Model

XTPR Model

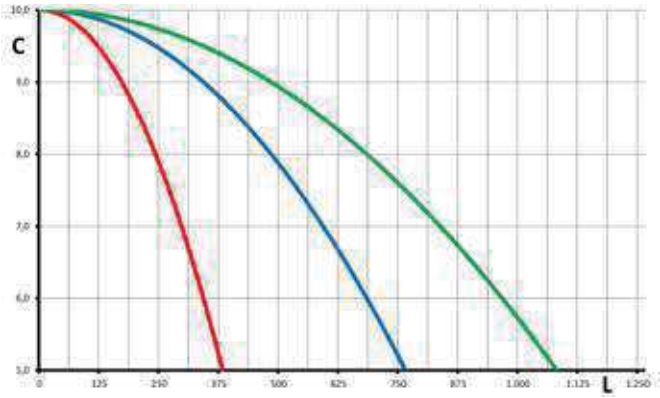
Materials

	Material	Norms	Specs	Indications
Worm	16NiCr4	EN 10084:2008	Casehardening alloy steel	Casehardened and ground on teeth and holds
Worm wheel	CuAl10Fe2-GM	EN 1982:2008	Aluminium bronze	Chill molded
Nut	CuAl10Fe2-GM	EN 1982:2008	Aluminium bronze	Chill molded
Spindle	X5 CrNiMo 17-12-2 (AISI 316)	EN 10088-1:2014	Stainless steel	Tr 20x4 (ISO 2901:2016) - Machined
Carter	X5 CrNiMo 17-12-2 (AISI 316)	EN 10088-1:2014	Stainless steel	Completely machined on 6 faces
Lubricant	Unimec Mark CA		Calcium based grease	0,1 kg

General features

Operating Temperature	-10 °C / 80 °C
Static Load (traction or compression)	20 kN
Dynamic Load (traction or compression)	10 kN
Max input speed	1800 rpm
Main Gearbox Weight	6 kg
Trapezoidal Screw Weight	2,22 kg/m
Anti-Rotation Torque with Max Load	17 Nm
Max admissible lateral loads	0 N
Center-to-center distance	30 mm
Max radial Load on worm Screw	220 N
Standard Working Conditions	25 °C - service 10%

Euler's law (safety factor =2; dynamic compression load)
Limit **L**oad 1 (red) - 2 (blue) - 3 (green)
C = Load [kN]
L = Overall trapezoidal screw length [mm]

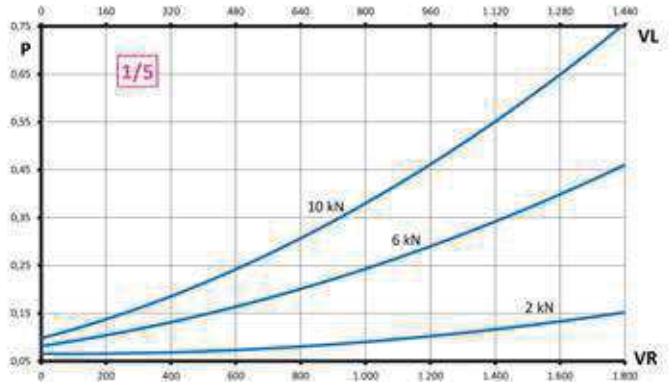


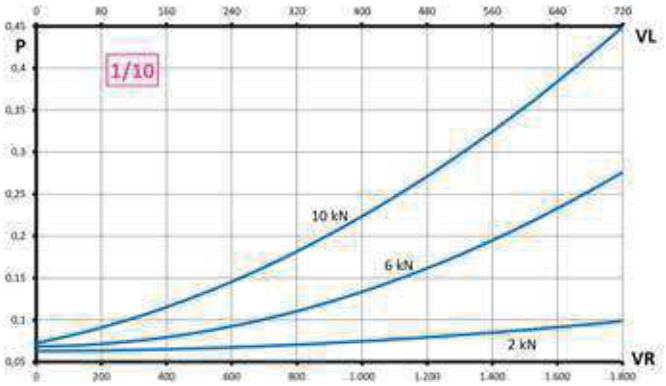
Specific features

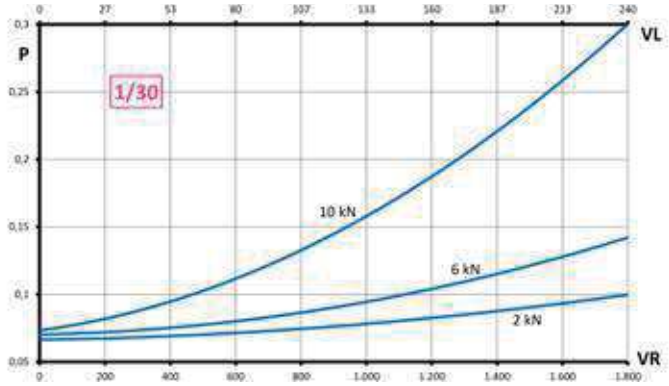
	Nominal Ratios 1/5	1/10	1/30
Real ratio	1/4,75	1/10,5	1/30
Translation per worm revolution	0,842 mm	0,38 mm	0,13 mm
Efficiency	31 %	28 %	20 %
Start-up efficiency	22 %	19 %	14 %
Maximum linear speed	1440	720	240
Torque at maximum load	4,2 Nm	2,3 Nm	1,1 Nm
Worm screw maximum torque	54 Nm	54 Nm	42 Nm
Loadless torque	0,25 Nm	0,2 Nm	0,15 Nm

› Power curves

The magenta zone indicates a potential heating risk. Working cycles must be carefully analized.
VR = Worm rotational speed [rpm]
VL = Spindle translation speed [mm/min]
P = Requested input power [kW]







› Motor Models

	IEC	Worm screw bore diameter	Centering diameter	Nominal power (4 poles motor)
	IEC 63 B5	11 mm	95 mm	0,25 kW
	IEC 71 B5 / 71 B14	14 mm	110 mm / 70 mm	0,55 kW
	IEC 80 B5 / 80 B14	19 mm	130 mm / 80 mm	1,1 kW

› Construction Forms

Form B	Form D	Form S	Form MBD	Form MD	Form MS	Form MBS
Form B	Form D	Form S	Form MBD	Form MD	Form MS	Form MBS