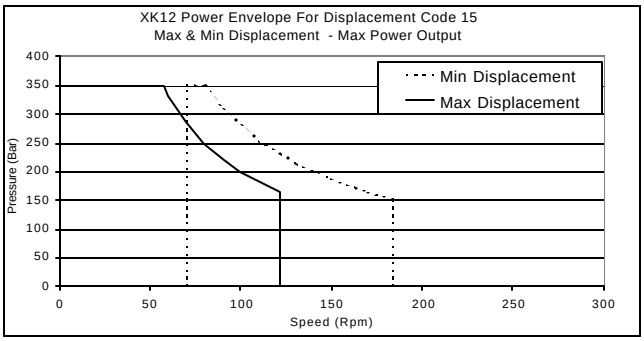
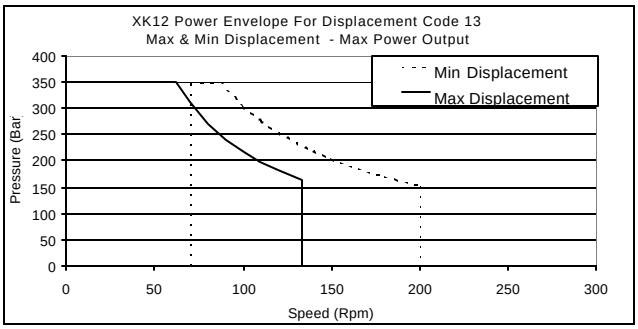
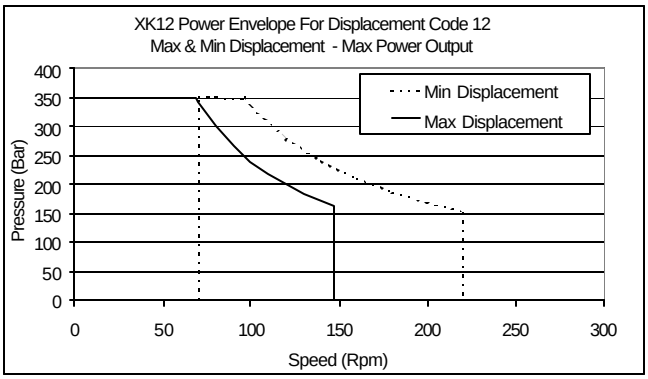
TECHNICAL DATA SHEETS

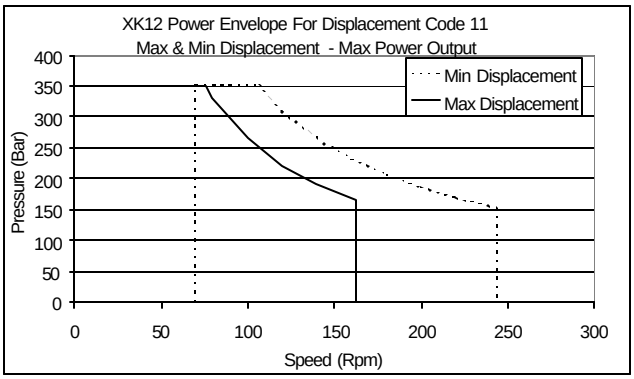
Max Operating Envelope

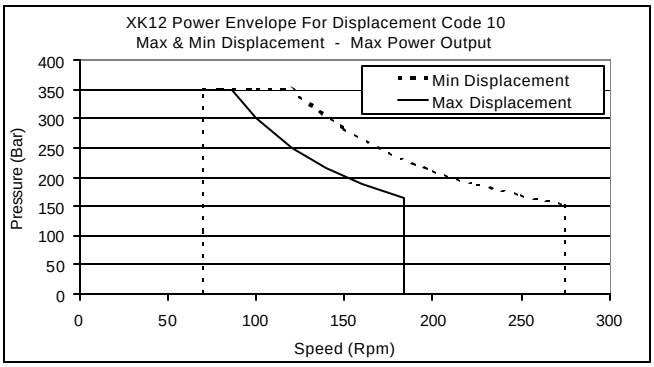
RotaryPower XK12 Motor











GRAPHS SHOW **MAXIMUM** ALLOWED OPERATING ENVELOPE FOR PREFERRED ROTATION DIRECTION (DISPLACEMENT RATIO 2:1)

CONSULT ROTARY POWER WHEN OTHER DISPLACEMENT RATIOS APPLY

For Optimum Life; continuous periods of operation should be no greater than **35KW** Hydraulic Power.

Note;

Pw (WEIGHTED AVERAGE DIFFERENTIAL PRESSURE), must be no greater than **200 bar** ..... Calculated as follows:-

$$Pw = \left\{ \frac{[N1.T1.P1^3] + [N2.T2.P2^3] + \ldots\ldots\ldots\ldots [Nn.Tn.Pn^3]}{Na} \right\}^{1/3}$$ Where;

N1(rpm) + P1(bar) @ T1(-) Duty N2(rpm) + P2(bar) @ T2(-) Duty ---------- > Nn(rpm) + Pn(bar) @Tn(-) Duty.

T1+T2+ ----------> Tn = 1.0

Na = [N1xT1]+[N2XT2]+[N3XT3]

Example (All pressures are differential);

P1 = 100bar ;P2 = 200 bar ;P3 = 150 bar N1 = 108rpm ;N2 = 50rpm ; N3 = 75rpm T1 = 10%Duty ;T2 = 30%Duty ;T3 = 60%Duty

Na = [108x0.1]+[50x0.3]+[75x0.6] = 71rpm

$$Pw = \left\{ \frac{[108x0.1x(100)^{\wedge 3}]+[50x0.3x(200)^{\wedge 3}]+[75x0.6x(150)^{\wedge 3}]}{71} \right\}^{1/3} = 158bar$$