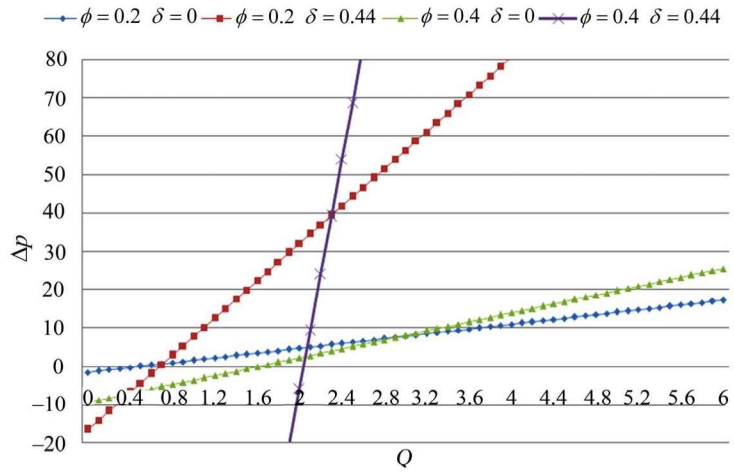

Figure 2.Pressure drop Δp versus the flow rate Q with the annulus aspect ratio δ= 0, 0.44 and the wave amplitude Φ = 0.2, 0.4.

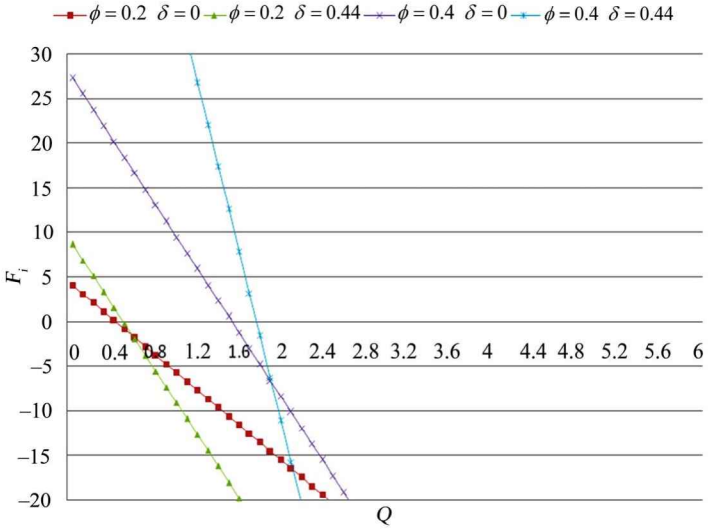

Figure 3. The inner friction force F_i versus flow rate Q with annulus aspect ratio δ= 0.32, 0.44 and wave amplitude Φ = 0.2, 0.4.

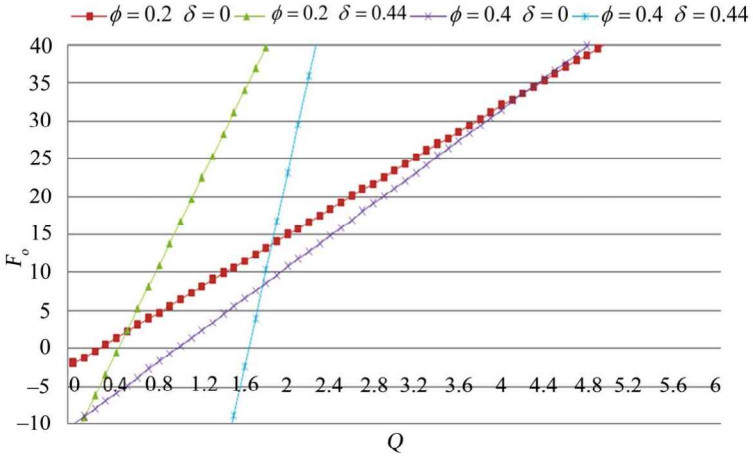

Figure 4. The outer friction force F_o versus flow rate Q with annulus aspect ratio δ= 0.32, 0.44 and wave amplitude Φ = 0.2, 0.4.

