Table 13-63

Calculation of max. permitted pulling forces

1 Pulling method	2 Cable type	3 Formula	4 Factor
With pulling eye on conductors	All cable types	$P = \sigma \cdot A$	σ = 50 N/mm^2 (Cu conductor) σ = 30 N/mm^2 (Al conductor)
With cable grip	Plastic-insulated cable, without metal sheath and without armouring (e. g. NYY, NYSY, NYSEY, N2XSY, etc.)	$P = \sigma \cdot A$	σ = 50 N/mm^2 (Cu conductor) σ = 30 N/mm^2 (Al conductor)
	All wire-armoured cables (e. g. NYFGY, NAYFGY etc.)	$P = K \cdot d^2$	K = 9 N/mm^2
	Cable without armour for tensile stresses:		
	Single-core cables (e. g. NKBA, NYKY, NKLEY etc.)	$P = K \cdot d^2$	K = 3 N/mm^2
	Three-core SL cables (e. g. NEKEBA, NAEKEBA etc.)	$P = K \cdot d^2$	K = 1 N/mm^2

A = conductor cross section (mm^2)
d = cable diameter (mm)

Table 13-64

Minimum bending radii

Cable	Paper-insulated cable		Plastic-insulated cable	
	With lead sheath	With smooth Al sheath	U_0 = 0.6 kV	U_0 > 0.6 kV
Single-core	25 × d	30 × d	15 × d	15 × d[1)]
Multicore	15 × d	25 × d	12 × d	15 × d
Many-core			12 × d	

d = Cable diameter (mm)

[1)] For stranded cables: diameter over laid-up conductor