

ADSS

All-dielectric self-supporting cables

 **KDP**[®]
WORLD CONNECTING CABLES



WORLD CONNECTING CABLES

ADSS CABLES

All-dielectric self-supporting (ADSS) cable is a type of optical fiber cable that is strong enough to support itself between structures without using conductive metal elements. It is used by electrical utility companies as a communications medium, installed along existing overhead transmission lines and often sharing the same support structures as the electrical conductors.

Information for installing ADSS cables such as maximum pole span, maximum installation and operation tensile load is provided in the datasheet of the individual product.

A bundle of optical fibers is shown against a dark blue background. The fibers are illuminated at their ends, creating a bright, starburst-like effect with numerous small, glowing blue and white points of light.

In the design of the cable, the internal glass optical fibers are supported with no strain, to maintain low optical loss throughout the life of the cable. The cable is jacketed to prevent moisture from degrading the fibers. The jacket also protects the polymer strength elements from the effect of solar ultraviolet light.

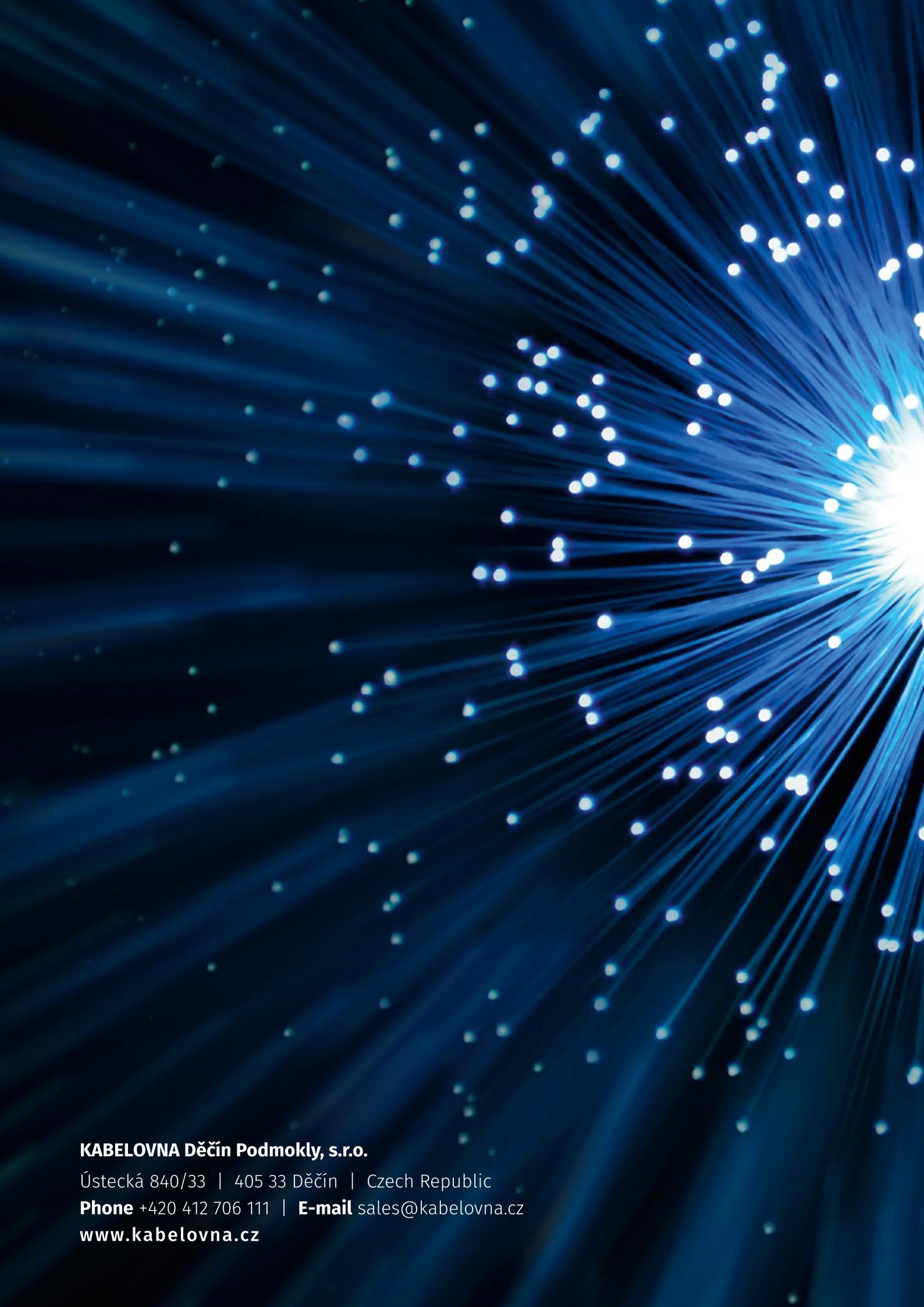
For installation of ADSS cables manufactured in KDP, the recommended vertical sag is 1.5 % of the nominal pole span value.

NESC CONDITIONS

The NESC has traditionally been an ultimate stress design method where all factors of safety are included in the loading conditions by applying applicable overload factors. Three cases for transverse loading are considered.

- 1.** General loading due to wind on wire and pole with ice.
- 2.** Extreme wind on all structures without conductors or ice. This provision is new in the 2002 NESC.
- 3.** Extreme wind on conductor and pole without ice if the structure exceeds 60 ft in height.

The NESC defines three general loading areas in the United States: heavy, medium, and light. For each of these loading areas general wind and ice loads are also defined as described in Table 1. Wind load is calculated including ice on the conductor but not on the structure.



KABELOVNA Děčín Podmokly, s.r.o.

Ústecká 840/33 | 405 33 Děčín | Czech Republic

Phone +420 412 706 111 | **E-mail** sales@kabelovna.cz

www.kabelovna.cz