ABOUT US

1993
The **year of foundation** of the company

2003
QMS in accordance with **ISO 9001** has been implemented

2009
The first **kilometer** of optical cable was produced

2010
A new workshop for cable production with an area of **5.5 thousand m²** was built

2011
The production of a product range for **FTTH** network using **GPON** technology was launched

2015
The LAN cable manufactured by KCEP was **successfully certified** in Germany in accordance with European standards

2016
The **serial production** of an optical microcable for blowing in accordance with European standards was launched

2018
In Germany successfully completed test of **optical cable** in accordance with European standards

2019
KCEP is the **main supplier** of optical cable for the government project “Digital Kazakhstan”

2022
Export share **50%**

KCEP

FIBER OPTICAL CABLE

KCEP

kcep.kz

KCEP

TOTAL AREA
100 000 m²

72 000 km
PRODUCTION CAPACITY OF FIBER OPTICAL CABLE

more
250
EMPLOYEES

KCEP
30 YEARS on the market and successfully supplies products to the CIS and European countries.

Today KCEP is one of the leading manufacturer of optical and LAN cables.

ГОСТ ISO 9001 ISO 14001 ISO 45001 IEC

INDOOR CABLE

Cable type KC-FTTH

Application for indoor installation, in pipes, on the walls of the buildings in cable ducts

1. Peripheral strength element
2. Optical fiber
3. Outer sheath

Technical data

Code of cable type	4037	4039	4042
Number of fibers	4		
Cable color	белый	черный	белый
Short-term crush test, kN/cm (N/10cm)	0,1 (1000)		0,15 (1500)
Dynamic tensile strength, not less than, kN	0,15		0,08
Operating temperature	-40 ... +50 °C	-40 ... +70 °C	-40 ... +50 °C
Installation temperature	-10 ... +40 °C		
Overall dimensions, thickness x height, mm	2,0x3,0		

KCEP OPTICAL CABLE MARKING CODIFIER

KC	OKG	nf	P	24	G.652.D	LSZH	2,7	1050
								Internal code of cable type
							Tensile strength, кN	
						Low smoke zero halogen sheath		
					Fibre standart			
				Number of optical fibers in cable				
			Absence of identification- central strength element made of galvanized steel wire P - central strength element made of FRP-rod A - strength element made of ARP-rod					
		Absence of identification -PE sheath nf - flame retardant sheath nf(A) - flame retardant sheath according to A category						
	Cable type*							
Optical cable manufacturer - KCEP (Kazcentrelectroprovod LLP)								

OKG – optical cable without armor;
OKL – optical cable with corrugated steel tape armor;
OKP – optical cable cable armored with class yarns;
OKK – optical cable cable armored with aramid yarns;
OKB – optical cable armored with galvanized steel wires
OKT – optical cable with suspended strength element made of galvanized steel rope;
OKLO – single loose tube optical cable with corrugated steel tape armor;
OKGO – single loose tube flat optical cable without armor;
OKTO – single loose tube optical cable with suspended strength element made of galvanized steel wire;
FTTH – Drop-cable.
FTTHSC – aerial drop-cable with suspended strength element made of steel wire;
FTTHD – aerial drop-cable with suspended strength element made of FRP-rod.

AIR BLOWN CABLE

Cable type KC-OKG

Application for installation in cable racks, on the walls of building in case of absence risks of mechanical damages, in protection pipes by blowing method

1. Central strength element
2. Optical fiber
3. Optical loose tube
4. Intermodular compound
5. Outer sheath

Technical data

Code of cable type	1084	1087	1056	10127	1050
Number of fibers	24	36		48	
Number of loose tube	6				
Number of fibers in loose tube	4	6		8	
Short-term crush test, kN/cm (N/10cm)	0,3 (3000)		0,25 (2500)	0,2 (2000)	0,3 (3000)
Dynamic tensile strength, not less than, kN	1,2	1,5			2,9
Operating temperature	-40 ... +60 °C				
Installation temperature	-10 ... +50 °C				
Cable outer diameter, mm	8,7	8,8	9,4	9,3	10,3

GENERAL SPETIFICATION

Standarts
ST TOO 143-1930-10-16-38-2019 / ST TOO 143-1930-10-16-56-2019 / ST TOO 143-1930-10-16-70-2013
ST RK 1798-2008 / ST RK ГОСТ Р 52266-2008
GOST 17.2.3.02-2014 / GOST 31565-2012
IEC 60304 / IEC 60794 / IEC 60331 / IEC 60332 / IEC 60754 / IEC 61034

Accordance ISO
ST RK ISO 9001-2016
ST RK ISO 450001-2019
ST RK ISO 14001-2016

Fiber type
Single Mode 250µm fiber accordihg to ITU-T G.657.A1 und G.652.D

Single Mode 250µm fiber accordihg to ITU-T G.652.D

Single Mode 250µm fiber accordihg to ITU-T G.657.A2

Marking accuracy ±0,5%

Length tolerance ±3%

All cable types in brochure could be provided with flame retardant characteristic with an outer sheath made of self-extinguishing PE or PVC compound, with "nf" added to the cable marking

CABLE FOR UNDERGROUND INSTALLATION

Cable type KC-OKB

Application for manual or mechanical installation in soils of all categories, except soils tend to negative temperature deformations, in case of high requirements for resistance to mechanical loads, in sewage systems, protective pipes, blocks, collectors

1. Central strength element
2. Optical fiber
3. Optical loose tube
4. Intermodular compound
5. Inner sheath
6. Zinc-coated steel
7. Outer sheath

Technical data

Code of cable type	6032	6033	6051	6054	6055
Number of fibers	20	30	48	24	48
Number of loose tube	5		4		
Number of fibers in loose tube	4	6	12	6	12
Short-term crush test, kN/cm (N/10cm)	0,55 (5500)	0,4 (4000)	0,5 (5000)	0,4 (4000)	
Dynamic tensile strength, not less than, kN	13,0		8,1	9,2	12,5
Operating temperature	-40 ... +60 °C			-50 ... +70 °C	
Installation temperature	-10 ... +50 °C				
Cable outer diameter, mm	11,9	12,5	14,1	11,4	12,4

PACKAGING ACCORDING TO GOST 18690-2012

Package type	Cable drum flange dimensions (with reel), mm	Drum width (with reel), mm	Weight (medium), kg
Cable drum 10	1000	680	65
Cable drum 12A	1220	900	100
Cable drum 14	1400	900	145
Cable drum 14G	1400	1090	150
Cable drum 17	1700	950	230
Cable drum 18A	1800	1390	400
Cable drum 18B	1800	1390	440
Cable drum 20A	2000	1360	495
Cable drum 25	2500	1680	1100

Package type	Cable coil dimensions, mm	Cable coil width (on pin), mm	Weight (medium), kg
Cable coil FTTH №1	450	440	5
Cable coil FTTH №2	550	440	6
Cable coil FTTH №3	600	520	12

There are two options for drums' coverage that KCEP offer:

- WP (wooden package) – package of the drum using wooden planks fixed by nails through stelltape to drums flanges;
- SP (soft package) – package of the cable on a drum using packing mat made of polymer tape with wooden battens.

CABLE FOR INSTALLATION IN CABLE DUCT SYSTEM

Cable type KC-OKL/KC-OKLO

Application for installation in cable ducts, pipes, blocks, collectors, on bridges and in shafts, without bending loads, in case of a risk of cable damage by rodents, in areas with the possibility of flooding for a long time, into the soils of 1-3 categories

1. Central strength element
2. Optical fiber
3. Optical loose tube
4. Intermodular compound
5. Water-blocking element
6. Steel corrugated tape
7. Outer sheath

Technical data

Code of cable type	2025	2026	2027	2028	2036	2037
Number of fibers	28	48	96	144	24	48
Number of loose tube	7	6	8	12	6	
Number of fibers in loose tube	4	8	12		4	8
Short-term crush test, kN/cm (N/10cm)	0,35 (3500)				0,3 (3000)	0,4 (4000)
Dynamic tensile strength, not less than, kN	2,0	2,5			3,0	
Operating temperature	-40 ... +60 °C	-40 ... +70 °C				
Installation temperature	-10 ... +50 °C					
Cable outer diameter, mm	9,9	11,0	13,5	17,0	8,5	9,9

1. Peripheral strength element
2. Optical fiber
3. Optical loose tube
4. Steel corrugated tape
5. Outer sheath

Technical data

Code of cable type	2205	2207
Number of fibers	24	
Number of loose tube	1	
Number of fibers in loose tube	2-24	
Short-term crush test, kN/cm (N/10cm)	0,4 (4000)	0,3 (3000)
Dynamic tensile strength, not less than, kN	3,0	1,8
Operating temperature	-40 ... +60 °C	
Installation temperature	-10 ... +50 °C	
Cable outer diameter, mm	8,9	7,8