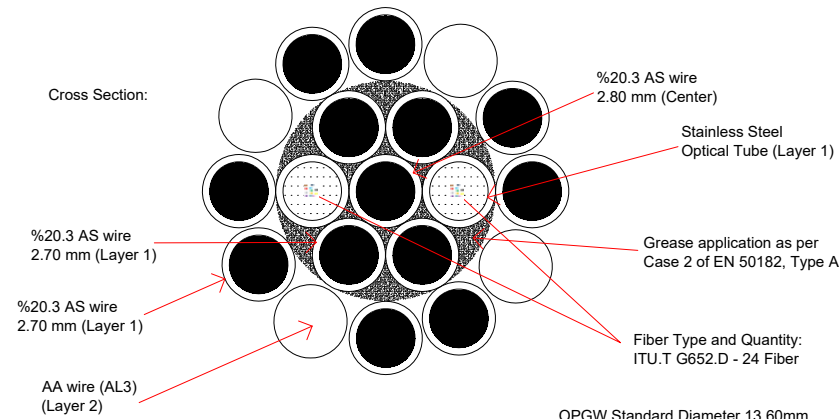


Type: OPGW-24B1-100 [112;60.1]



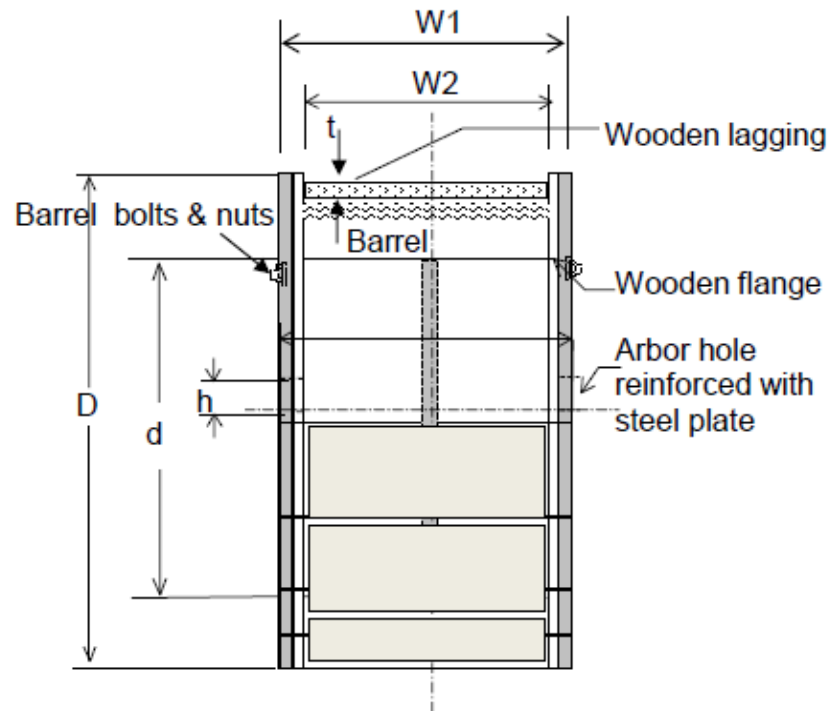
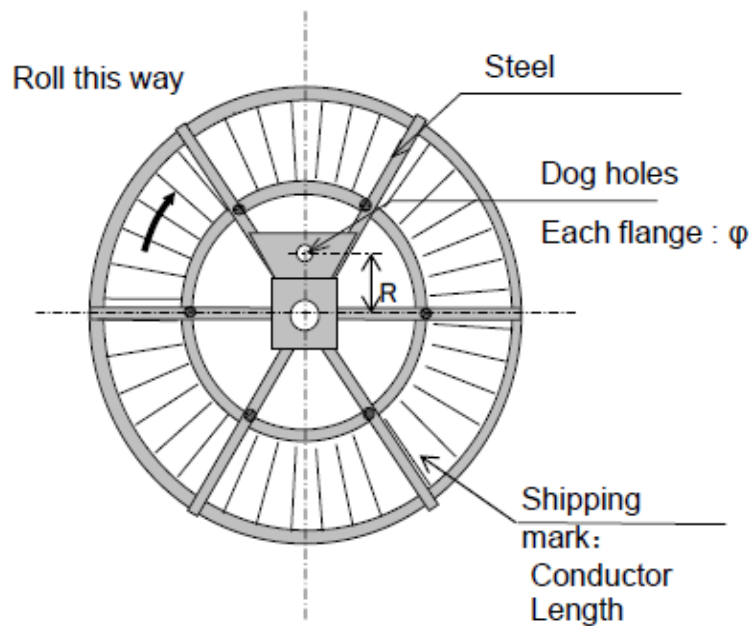
		Named	No.	Diameter
Structure Details	Center	%20.3 AS wire	1	2.80 mm
	Layer 1	%20.3 AS wire	4	2.70 mm
		SUS-Tube	2	2.70 mm
	Layer 2	%20.3 AS wire	8	2.70 mm
		AA wire (AL3)	4	

Technical Data	According to IEEE std 1138, IEC 60794-4 standards
	Stranding direction of outer layer is "Right-hand"
	Fiber No. & Type 24 G.652D
	Standard Diameter 13.60 mm
	Supporting Cross Section 97.77 mm ²
	Section of AS wire 74.86 mm ²
	Section of AA wire 22.90 mm ²
	Approximate mass 605.5 kg/km
	Ultimate Tensile Strength 112.3 kN
	Rated Tensile Strength 101.1 kN
	Maximum Allowable Tension(40%RTS) 413.6 N/mm2
	Everyday Stress(20%RTS) 206.8 N/mm2
	Strain Margin Stress(60%RTS) 620.4 N/mm2
	Modulus of Elasticity 139.4 GPa
	Thermal Elongation Coefficient 14.1 ×10 ⁻⁶ /°C
	Calculated D.C. Resistance at 20°C 0.641 Ω/km
	Short-Circuit Current (0.6 sec, 40~200°C) 10.0 kA
	Short-Circuit Current Capacity (40~200°C) 60.1 kA ² ·s
	Minimum Bending Radius 272 mm
	Ratio between Pull and Weight 18.91 km
Temperature Range:	Installation -10°C~+50 °C
	Transportation and Operation -40°C~+80 °C

Notes:

– All dimensions are in millimetres.

1	Revised as per "7145A07-OHL-LOT 2-G5-MI-157"		25.04.2022		G.B
0	First Submission		31.03.2022		G.B
REV	DESCRIPTION/		DATE		BY
PROJECT NAME					
Open Programme Extension of the Transmission Network II					
BMZ No. 2015 68 286					
Contract Identification No. KIW/DSI/OHL-TD-Lot 2					
EMPLOYER					
JSC Georgian State Electrosystem (GSE)					
Baratskhvili Street, Tbilisi, Georgia, 0105					
info@gse.com.ge					
ENGINEER					
Fichtner GmbH & Co. KG					
Sarweystrasse 370191 Stuttgart / Germany					
info@fichtner.de					
CONTRACTOR					
Mitas Energy and Metal Constuction Inc.					
Eski Güvercinlik Yolu No: 113 - Gazi Ankara / Turkey					
info@mitastower.com					
VENDOR					
Henglong Optic-Electric Co. Ltd.					
No.88 Henglong Road, Wujiang District, Suzhou, 215200, China					
VENDOR IDENTIFICATION NUMBER / TITLE					
Type: OPGW-24B1-100 [112;60.1] / 110 kV Zone 2 OPGW					
APPROVAL AREA			STATUS	STAMP	
REVIEWED BY	G.B		AP ☐		
DATE OF REVIEW	13.03.2022		AC ☐		
			NA ☐		
APPROVED BY	E.B		TITLE		
CHECKED BY	E.B		110 kV - OPGW 95 - Cross-Section		
DESIGNED BY	H.C				
DRAWN BY	H.C				
DATE OF ISSUE	13.03.2022				
SCALE	PAGE SIZE	DOC NO.		REV.	PAGE
N.A.		7145A07-PO-OPGW-DWG-2204		1	1/2



Notes:

–All dimensions are in millimetres.

1–The inner surface of the drums will be covered with oiled paper.

2– Heat Shrinking Caps will be used in order to protect against water ingress.

3– Drums will be protected with wooden battens.

4– A weatherproof label solidly attached to the drum flange will provide the information below;

a– Employer Name

b– Project name

c– Order number

d– Length and gross weight

e– Date of manufacturing

f– Rolling direction will be painted on both flanges of the OPGW drum.

1	Revised as per "7145A07-OHL-LOT 2-G5-MI-157"	25.04.2022	G.B
0	First Submission	31.03.2022	G.B
REV	DESCRIPTION/	DATE	BY
PROJECT NAME Open Programme Extension of the Transmission Network II BMZ No. 2015 68 286 Contract Identification No. KIW/DSI/OHL-TD-Lot 2			
EMPLOYER JSC Georgian State Electrosystem (GSE) Baratashvili Street, Tbilisi, Georgia, 0105 info@gse.com.ge			
ENGINEER Fichtner GmbH & Co. KG Sarweystrasse 370191 Stuttgart / Germany info@fichtner.de			
CONTRACTOR Mitas Energy and Metal Constuction Inc. Eski Güvercinlik Yolu No: 113 - Gazi Ankara / Turkey info@mitastower.com			
VENDOR Henglong Optic-Electric Co. Ltd. No.88 Henglong Road, Wujiang District, Suzhou, 215200, China			
VENDOR IDENTIFICATION NUMBER / TITLE Type: OPGW-24B1-100 [112;60.1] / 110 kV Zone 2 OPGW Drum			
APPROVAL AREA		STATUS	STAMP
REVIEWED BY	G.B	AP ☐	
DATE OF REVIEW	13.03.2022	AC ☐	
		NA ☐	
APPROVED BY	E.B	TITLE	
CHECKED BY	E.B	110 kV - OPGW 95 - Cross-Section	
DESIGNED BY	H.C		
DRAWN BY	H.C		
DATE OF ISSUE	13.03.2022		
SCALE	PAGE SIZE	DOC NO.	REV.
N.A.		7145A07-PO-OPG-DWG-2204	1
			2/2

Length (km)	Reel type	Approximate dimension (mm)								Net Weight (kg)	Gross Weight (kg)	OPGW Type
		D (Flange)	d (Barrel)	W1	W2	h	t	φ	R			
~4.5	steel wooden	1600 ±20	800 ±10	1010 ±20	800 ±10	80 ±5	25 ±3	50 ±5	150 ±10	2725	2930	OPGW-24B1-100[112;60.1]