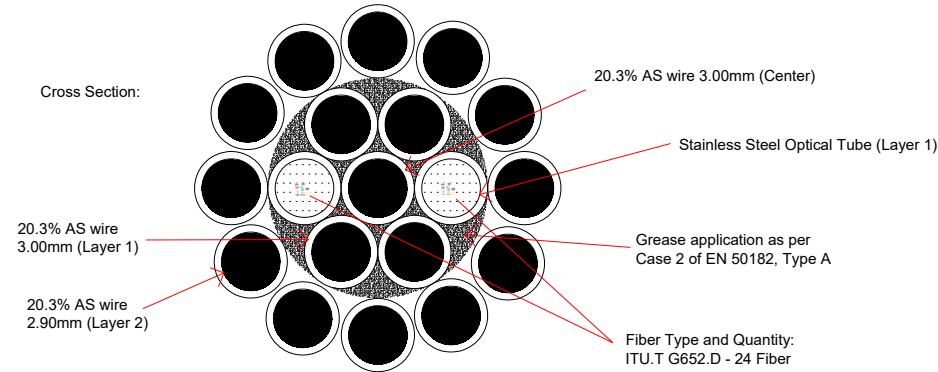


Type: OPGW-24B1-115 [163;60.1]



OPGW Standard Diameter 14.60mm

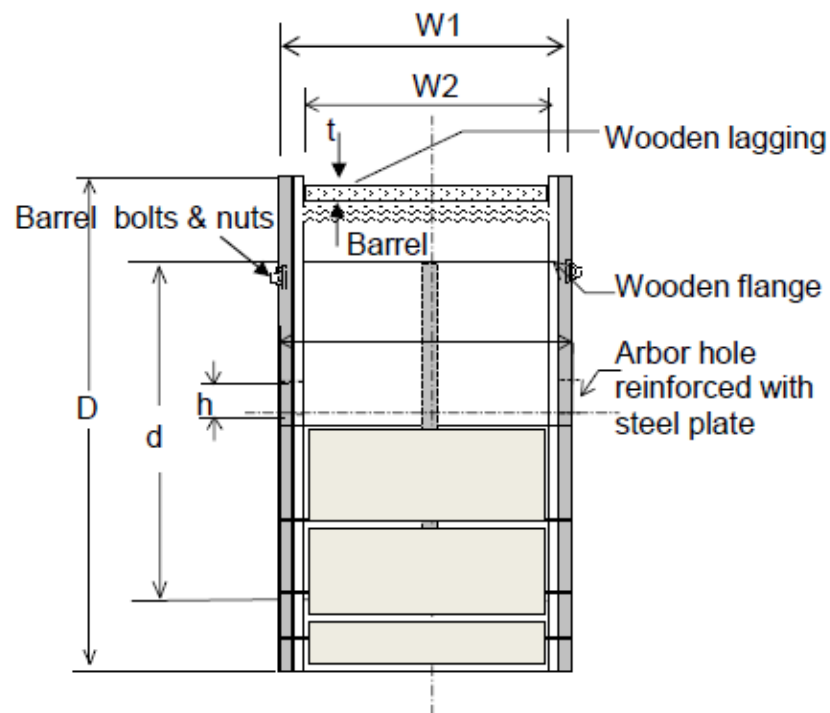
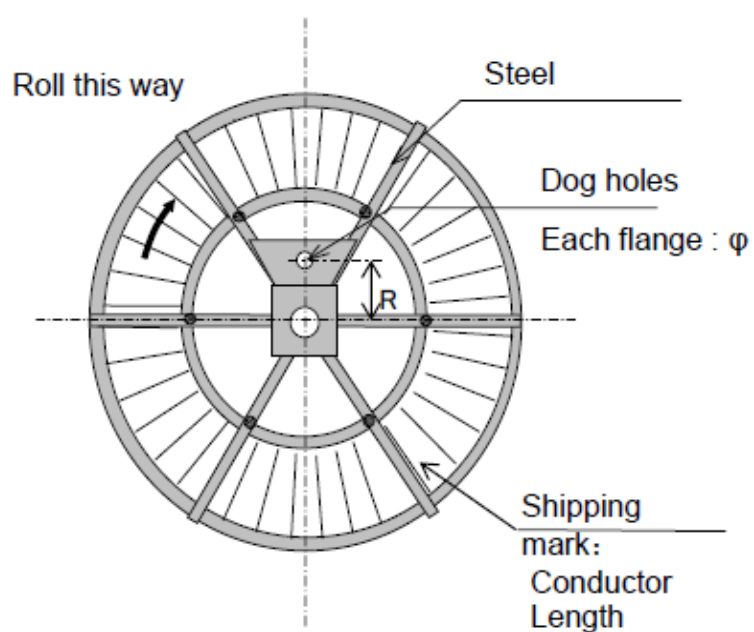
		Named	No.	Diameter
Structure Details	Center	%20.3 AS wire	1	3.00 mm
	Layer 1	%20.3 AS wire	4	2.90 mm
		SUS-Tube	2	2.90 mm
	Layer 2	%20.3 AS wire	12	2.90 mm

Technical Data	According to IEEE std 1138、IEC 60794-4 standards		
	Stranding direction of outer layer is "Right-hand"		
	24 G.652D		
	Standard Diameter	14.60 mm	
	Supporting Cross Section	112.75 mm ²	
	Section of AS wire	112.75 mm ²	
	Approximate mass	801.0 kg/km	
	Ultimate Tensile Strength	163.5 kN	
	Rated Tensile Strength	147.1 kN	
	Maximum Allowable Tension(40%RTS)	522.0 N/mm2	
	Everyday Stress(20%RTS)	261.0 N/mm2	
	Strain Margin Stress(60%RTS)	783.0 N/mm2	
	Modulus of Elasticity	162.0 GPa	
	Thermal Elongation Coefficient	13.0 ×10 ⁻⁶ /°C	
	Calculated D.C. Resistance at 20°C	0.764 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	292 mm	
	Ratio between Pull and Weight	20.81 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-158"			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. KMW/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					
Hengtong Optic-Electric Co. Ltd.					
No.88 Henglong Road, Wujiang District, Suzhou, 215200, China					
VENDOR IDENTIFICATION NUMBER / TITLE					
Type: OPGW-24B1-115 [163;60.1] / 110 kV Zone 1 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 120 - 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-2208		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-158"	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 Hengtong Optic-Electric Co. Ltd. No.88 Hengtong Road, Wujiang District, Suzhou, 215200, China			
VENDOR IDENTIFICATION NUMBER / TITLE Type: OPGW-24B1-115 [163;60.1] / 110 kV OPGW Zone 1 Drum			

APPROVAL AREA		STATUS AP ☐ AC ☐ NA ☐	STAMP
REVIEWED BY	G.B		
DATE OF REVIEW	13.03.2022		
APPROVED BY	E.B	TITLE 110 kV - OPGW 120 - Cross-Section	
CHECKED BY	E.B		
DESIGNED BY	H.C		
DRAWN BY	H.C		
DATE OF ISSUE	13.03.2022		

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	3605	3810	OPGW-24B1-115[163;60.1]

SCALE	PAGE SIZE	DOC NO.	REV.	PAGE
N.A.		7145A07-PO-OPG-DWG-2208	1	2/2