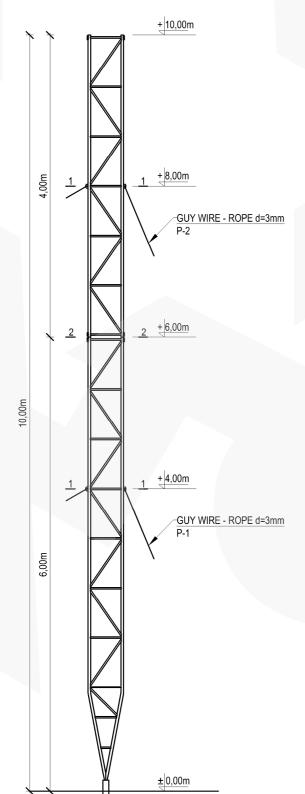
## **TYPICAL MAST M435/H10**

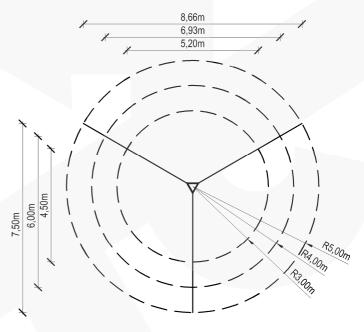
### **ASSEMBLY DRAWING**

**SCALE 1:50** 



### **GUY WIRES RANGE**

**SCALE 1:150** 



#### NOTES:

- 1. Typical mast construction M435/H10
- 2. Aluminum alloy: EN AW-6005A T6
- 3. Connections: fillet welded with TIG (GTAW) argon methode by the requirements of ISO 3834-2
- Results may vary depending on local geometry and mast foundation
- 5. Characteristic wind speed: V<sub>k</sub>=22m/s
- 6. Terrain category: II
  7. Reliability class: II
- 8. Ice density: 700kg/m<sup>3</sup>
- 9. Ice thickness: 2,0cm
- 10. Equipment total weight limit on the mast: 60kg
- 11. Equipment area on the mast:
- S=0,5m<sup>2</sup> at the top of the mast
- 12. Calculations made for anchorages in distances:
- L=3,0m or 4,0m or 5,0m
- 13. Mast must be set under construction law
- 14. Construction on which mast will be located must be able to transfer reactions
- 15. Lead assembly with wind speed not more than 5m/s
- 16. Guy wires: steel ropes 3mm Rm=1770MPa T1x19 by EN 12385
- 17. Initial tension of guy wires: from 8% to 15% of rated breaking strength of the guy

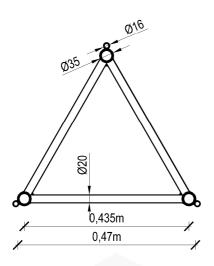
Manufacturer:	RETIS				
	WWW.RETIS.PL WWW.MASZTY-RE	TIS.PL			
Investment: SERIES OF ALUMINUM LATTICE MASTS - TYPE-435					
Drawing title: TYPIC	CAL MAST M435/H10 - ASSEN	MBLY DRAWING + GUY WIR	ES RANGE		
Date: 02.2013	Phase: typical projec	Project No.: RETIS M435	Revision:		
Industry: construction	Project No.: RETIS_K	Project No.: RETIS_KK_M435_H10_01			

# **XETIS**CONSTRUCTION

## **TYPICAL MAST M435/H10**

## **SECTION 1-1**

SCALE 1:10

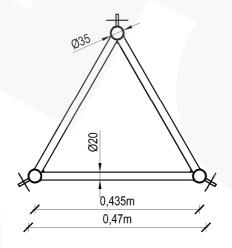


#### Maximum reactions for the anchorages:

[kN]	Base	Guys
L=3,0	$F_x$ =0,26 $F_y$ =0,20 $F_z$ =12,46	$F_x=3,52$ $F_y=2,69$ $F_z=6,92$
L=4,0	F <sub>x</sub> =0,33 F <sub>y</sub> =0,26 F <sub>z</sub> =11,37	$F_x=3,58$ $F_y=2,70$ $F_z=5,36$
L=5,0	$F_x$ =0,39 $F_y$ =0,31 $F_z$ =11,27	$F_x=3,68$ $F_y=2,74$ $F_z=4,44$

## **SECTION 2-2**

**SCALE 1:10** 



#### Maximum forces in guy wire ropes for distances:

[kN]	P-1	P-2
L=3,0	3,84	4,25
L=4,0	2,99	3,72
L=5,0	2,59	3,34

#### NOTES:

- 1. Typical mast construction M435/H10
- 2. Aluminum alloy: EN AW-6005A T6
- Connections: fillet welded with TIG (GTAW) argon methode by the requirements of ISO 3834-2
- Results may vary depending on local geometry and mast foundation
   Characteristic wind speed: V k=22m/s
- Terrain category: II
- 7. Reliability class: II
- 8. Ice density: 700kg/m<sup>3</sup>
  9. Ice thickness: 2,0cm
- 10. Equipment total weight limit on the mast: 60kg
- 11.Equipment area on the mast:
  - S=0,5m<sup>2</sup> at the top of the mast
- 12. Calculations made for anchorages in distances: L=3,0m or 4,0m or 5,0m
- 13. Mast must be set under construction law
  14. Construction on which mast will be located must be able to transfer reactions
  15. Lead assembly with wind speed not more than 5m/s
- 16. Guy wires: steel ropes 3mm Rm=1770MPa T1x19 by EN 12385
- 17. Initial tension of guy wires: from 8% to 15% of rated breaking strength of the guy

Manufacturer:	RETIS WWW.RETIS.PL WWW.MASZTY-RETIS.PL						
Investment: SERIES OF ALUMINUM LATTICE MASTS - TYPE-435							
Drawing title:  TYPICAL MAST M435/H10 - SECTIONS + FORCES							
Date: 02.2013		Phase: typical project	Project No.: RETIS M435	Revision:			
Industry: constructio	n	Project No.: RETIS_KK_M435_H10_02					