Let $G$ be a simply connected algebraic group of type $B_n$ or $D_n$ over an algebraically closed field $K$ of characteristic $p \geq 0$, $n > 4$, and $H \subset G$ be a naturally embedded subgroup of type $A_2$. We say that a subgroup is naturally embedded into $G$ if it is generated by the root subgroups of $G$ associated with certain simple and opposite to them roots. Suppose that $\omega_1, \ldots, \omega_n$ are the fundamental weights and $\omega = m_1\omega_1 + \ldots + m_n\omega_n$ is a dominant weight of $G$. Denote by $V_\omega$ the simple rational $G$-module with highest weight $\omega$ and by $Irr_H\omega$ the set of highest weights of composition factors for the restriction of $V_\omega$ to $H$. The set of all dominant weights for the group $H$ can be identified with the set $\mathbb{N}^2$ of pairs of nonnegative integers with the help of the following map $x_1\omega_1 + x_2\omega_2 \mapsto (x_1, x_2)$. Therefore we can write $Irr_H\omega \subseteq \mathbb{N}^2$. Let $M$ be the value of the weight $\omega$ on the maximal root and $m = M - m_2$. We have $M = m_1 + 2m_2 + \ldots + 2m_{n-1} + m_n$ for $G = B_n(K)$ and $M = m_1 + 2m_2 + \ldots + 2m_{n-2} + m_{n-1} + m_n$ for $G = D_n(K)$.

The following holds:

**Proposition 1** *Let $p = 0$. Then*

$$Irr_H\omega = \{(x_1, x_2) \in \mathbb{N}^2 \mid x_1 \leq m, x_2 \leq m, x_1 + x_2 \leq M\}. \tag{1}$$

**Definition 2** *Let $p > 0$. The weight $\omega$ is locally small if $m_i + m_{i+1} + m_{i+2} + m_{i+3} + 3 \leq p$ for all $i$ with $1 \leq i \leq n-4$ and $m_{n-3} + m_{n-2} + 2m_{n-1} + m_n + 3 \leq p$ for $G = B_n(K)$ or $m_{n-3} + m_{n-2} + 2m_{n-1} + m_n + 3 \leq p$ for $G = D_n(K)$.*

**Theorem 3** *Let $p > 0$ and $\omega$ be locally small. Then the set $Irr_H\omega$ coincides with the relevant set in characteristic 0, i.e. (1) holds.*