

Category	Subcategory	Requirements
Preselection	—	$m_{\ell\ell} > 12 \text{ GeV}$, $p_{T1} > 25$ (20) GeV for e (μ), $p_{T2} > 13$ (10) GeV for e (μ), track $p_T^{\text{miss}} > 20 \text{ GeV}$, $p_T^{\ell\ell} > 30 \text{ GeV}$ no additional leptons with $p_T > 10 \text{ GeV}$ two electrons or two muons with opposite charges
0-jet ggH-tagged	e^+e^- $p_{T2} < 20 \text{ GeV}$ $\mu^+\mu^-$ $p_{T2} < 20 \text{ GeV}$	DYMVA > 0.991 , $m_{\ell\ell} < 55 \text{ GeV}$, $m_T > 50 \text{ GeV}$, $p_{T2} < 20 \text{ GeV}$, $\Delta\phi_{\ell\ell} < 1.7$ no jets with $p_T > 30 \text{ GeV}$ no b-tagged jets with $p_T > 20 \text{ GeV}$
0-jet ggH-tagged	e^+e^- $p_{T2} > 20 \text{ GeV}$ $\mu^+\mu^-$ $p_{T2} > 20 \text{ GeV}$	DYMVA > 0.991 , $m_{\ell\ell} < 55 \text{ GeV}$, $m_T > 50 \text{ GeV}$, $20 \text{ GeV} < p_{T2} < 50 \text{ GeV}$, $\Delta\phi_{\ell\ell} < 1.7$ no jets with $p_T > 30 \text{ GeV}$ no b-tagged jets with $p_T > 20 \text{ GeV}$
1-jet ggH-tagged	e^+e^- $\mu^+\mu^-$	DYMVA > 0.95 , $m_{\ell\ell} < 57 \text{ GeV}$, $50 < m_T < 155 \text{ GeV}$, $p_{T1} < 50 \text{ GeV}$, $\Delta\phi_{\ell\ell} < 1.75$ exactly one jet with $p_T > 30 \text{ GeV}$ no b-tagged jets with $p_T > 20 \text{ GeV}$