

Parameter of interest:  $R = \mu_{\text{VBF,VH}} / \mu_{\text{ggH,ttH}}$ .

Other parameters:  $\mu_{\text{ggH,ttH}}^{\gamma\gamma}$ ,  $\mu_{\text{ggH,ttH}}^{\text{ZZ}}$ ,  $\mu_{\text{ggH,ttH}}^{\text{WW}}$ ,  $\mu_{\text{ggH,ttH}}^{\tau\tau}$ , and  $\mu_{\text{ggH,ttH}}^{\text{bb}}$ .

Signal model	$\text{H} \rightarrow \gamma\gamma$	$\text{H} \rightarrow \text{ZZ}$	$\text{H} \rightarrow \text{WW}$	$\text{H} \rightarrow \tau\tau$	$\text{H} \rightarrow \text{bb}$
ggH	$\mu_{\text{ggH,ttH}}^{\gamma\gamma}$	$\mu_{\text{ggH,ttH}}^{\text{ZZ}}$	$\mu_{\text{ggH,ttH}}^{\text{WW}}$	$\mu_{\text{ggH,ttH}}^{\tau\tau}$	$\mu_{\text{ggH,ttH}}^{\text{bb}}$
VBF	$R \mu_{\text{ggH,ttH}}^{\gamma\gamma}$	$R \mu_{\text{ggH,ttH}}^{\text{ZZ}}$	$R \mu_{\text{ggH,ttH}}^{\text{WW}}$	$R \mu_{\text{ggH,ttH}}^{\tau\tau}$	$R \mu_{\text{ggH,ttH}}^{\text{bb}}$
VH	$R \mu_{\text{ggH,ttH}}^{\gamma\gamma}$	$R \mu_{\text{ggH,ttH}}^{\text{ZZ}}$	$R \mu_{\text{ggH,ttH}}^{\text{WW}}$	$R \mu_{\text{ggH,ttH}}^{\tau\tau}$	$R \mu_{\text{ggH,ttH}}^{\text{bb}}$
ttH	$\mu_{\text{ggH,ttH}}^{\gamma\gamma}$	$\mu_{\text{ggH,ttH}}^{\text{ZZ}}$	$\mu_{\text{ggH,ttH}}^{\text{WW}}$	$\mu_{\text{ggH,ttH}}^{\tau\tau}$	$\mu_{\text{ggH,ttH}}^{\text{bb}}$