Leptoquark	Spin	F	$SU(3)_C \otimes SU(2)_L \otimes U(1)_Y$ representation	Q_{EM}	Coupling		Decay mode
S_1	0	2	$(\mathbf{3},\mathbf{1},-2/3)$	$-1/3$	$\lambda_{L,R}(u, e_{L,R}),$	$-\lambda_L(d, \nu_e)$	$t\tau^-,\ b\nu$
$\tilde{S}_1$	0	2	$(\mathbf{3},\mathbf{1},-8/3)$	$-4/3$	$\lambda_R(d, e_R)$		$b\tau^-$
S_2	0	0	$(\overline{\mathbf{3}},\mathbf{2},-7/3)$	$-2/3$ $-5/3$	$\lambda_L(u, \nu_e),$ $\lambda_{L,R}(u, e_{L,R})$	$\lambda_R(d, e_R)$	$\bar{t}\nu\ ,\ b\tau^+$ $\bar{t}\tau^-$
$\tilde{S}_2$	0	0	$(\overline{\mathbf{3}},\mathbf{2},-1/3)$	$+1/3$ $-2/3$	$\lambda_L(d, \nu_e)$ $\lambda_L(d, e_L)$		$\bar{b}\nu$ $\bar{b}\tau^-$
S_3	0	2	$(\mathbf{3},\mathbf{3},-2/3)$	$+2/3$ $-1/3$ $-4/3$	$\sqrt{2}\lambda_L(u, \nu_e)$ $-\lambda_L(u, e_L),$ $-\sqrt{2}\lambda_L(d, e_L)$	$-\lambda_L(d, \nu_e)$	$t\nu$ $t\tau^-,\ b\nu$ $b\tau^-$
V_1	1	0	$(\overline{\mathbf{3}},\mathbf{1},-4/3)$	$-2/3$	$\lambda_{L,R}(d, e_{L,R}),$	$\lambda_L(u, \nu_e)$	$\bar{b}\tau^-,\ \bar{t}\nu$
$\tilde{V}_1$	1	0	$(\overline{\mathbf{3}},\mathbf{1},-10/3)$	$-5/3$	$\lambda_R(u, e_R)$		$\bar{t}\tau^-$
V_2	1	2	$(\mathbf{3},\mathbf{2},-5/3)$	$-1/3$ $-4/3$	$\lambda_L(d, \nu_e),$ $\lambda_{L,R}(d, e_{L,R})$	$\lambda_R(u, e_R)$	$b\nu\ ,\ t\tau^-$ $b\tau^-$
$\tilde{V}_2$	1	2	$(\mathbf{3},\mathbf{2},+1/3)$	$+2/3$ $-1/3$	$\lambda_L(u, \nu_e)$ $\lambda_L(u, e_L)$		$t\nu$ $t\tau^-$
V_3	1	0	$(\overline{\mathbf{3}},\mathbf{3},-4/3)$	$+1/3$ $-2/3$ $-5/3$	$\sqrt{2}\lambda_L(d, \nu_e)$ $-\lambda_L(d, e_L),$ $\sqrt{2}\lambda_L(u, e_L)$	$\lambda_L(u, \nu_e)$	$\bar{b}\nu$ $\bar{b}\tau^-,\ \bar{t}\nu$ $\bar{t}\tau^-$