

$$\begin{array}{ccc}
& b_{S;ikl}^Y \circ (F_{S;ik} \times F_{S;kl}) \circ (b_{S;ijk}^X \times 1) & \\
1 * \xi_{S;ijk} \nearrow & & \searrow \xi_{S;ikl} * 1 \\
b_{S;ikl}^Y \circ (b_{S;ijk}^Y \times 1) \circ (F_{S;ij} \times F_{S;jk} \times F_{S;kl}) & & F_{S;il} \circ b_{S;ikl}^X \circ (b_{S;ijk}^X \times 1) \\
\downarrow \alpha_{S;ijkl}^Y * 1 & & \downarrow 1 * \alpha_{S;ijkl}^X \\
b_{S;ijl}^Y \circ (1 \times b_{S;jkl}^Y) \circ (F_{S;ij} \times F_{S;jk} \times F_{S;kl}) & & F_{S;il} \circ b_{S;ijl}^X \circ (1 \times b_{S;jkl}^X) \\
1 * \xi_{S;jkl} \searrow & & \nearrow \xi_{S;ijl} * 1 \\
& b_{S;ijl}^Y \circ (F_{S;ij} \times F_{S;jl}) \circ (1 \times b_{S;jkl}^X) &
\end{array}$$