Aspect	Deployment	StatefulSet
Data persistence	Stateless	Stateful
Pod name and identity	Pods are assigned an ID that consists of the deployment name and a random hash to generate a temporarily unique identity	Each pod gets a persistent identity consisting of the StatefulSet name and a sequence number
Interchangeability	Pods are identical and can be interchanged	Pods in a StatefulSet are neither identical nor interchangeable
Behavior	A pod can be replaced by a new replica at any time	Pods retain their identity when rescheduled on another node
Volume claim	All replicas share a PVC and a volume	Each pod gets a unique volume and PVC
Allowed volume access mode(s)	ReadWriteMany and ReadOnlyMany	ReadWriteOnce
Pod interaction	Requires a service to interact with the pods	The headless service handles pod network identities
Order of pod creation	Pods are created and deleted randomly	Pods are created in a strict sequence and cannot be deleted randomly