

Table 3. Typical valve suitability chart

Valve type	Service or function										
	On-off	Throttling	Diverting	No reverse flow	Pressure control	Flow control	Pressure relief	Quick opening	Free draining	Low pressure drop	Handling solids in suspension
Ball	S	M	S	—	—	—	—	S	—	S	LS
Butterfly	S	S	—	—	—	S	—	S	S	S	S
Diaphragm	S	M	—	—	—	—	—	M	M	—	S
Gate	S	—	—	—	—	—	—	S	S	S	—
Globe	S	M	—	—	—	M	—	—	—	—	—
Plug	S	M	S	—	—	M	—	S	S	S	LS
Oblique (Y)	S	M	—	—	—	M	—	—	—	—	—
Pinch	S	S	—	—	—	S	—	—	S	S	S
Slide	—	M	—	—	—	M	—	M	S	S	S
Swing-check	—	—	—	S	—	—	—	—	—	S	—
Tilting-disc	—	—	—	S	—	—	—	—	—	S	—
Lift-check	—	—	—	S	—	—	—	—	—	—	—
Piston-check	—	—	—	S	—	—	—	—	—	—	—
Butterfly-check	—	—	—	S	—	—	—	—	—	—	—
Pressure-relief	S	—	—	—	—	—	S	—	—	—	—
Pressure-reducing	—	—	—	—	S	—	—	—	—	—	—
Sampling	S	—	—	—	—	—	—	—	—	—	—
Needle	—	S	—	—	—	—	—	—	—	—	—

Key:

S = Suitable choice

M = May be suitable in modified form

LS = Limited suitability