

Characteristics

Our patented SigmaSeal® system is the ideal packing set for valve and choke stems. The self-energizing design of this seal eliminates the need for adjustable glands or live loading, while offering excellent sealability against fluid and gas media. Automatic adjustments for wear, misalignment, and service irregularities minimize maintenance during high-cycling, resulting in cost-performance value.

In addition to these benefits, our SigmaSeal® packing offers low friction and reduced fugitive emissions in reciprocating or rising stem applications. A wide range of materials can be used in designing this packing set. The result is a sealing solution uniquely designed to withstand the pressure and temperature extremes found in hostile chemical environments.

SigmaSeal® packing sets are offered in two standard material combinations:

Material Code	Compounds	Temperature Range	Service Pressure
A	777M/SIL/711	-50°F (-46°C) to +350F (177°C)	To 2,500 psi (172 bar)
B	782/SIL/745	-40°F (-40°C) to +450F (232°C)	To 5,000 psi (345 bar)

Applications

SigmaSeal® packing is an ideal choice for the following valve types: control, gate, plug, quarter turn, or ball valves. In addition to these applications, it is also suited for chokes and slow reciprocating pumps.

Gland Recommendations

Inches			
Cross Section (U)	Axial Seal Length (H)	Axial Gland Length (L)	Stem Range
.188"	.481	.509	.312-.900
.250"	.639	.672	.700-1.800
.312"	.797	.834	1.000-3.000
.375"	.958	.999	1.500-4.800
.500"	1.278	1.326	2.600-9.400
.625"	1.598	1.652	4.100-16.000
.750"	1.917	1.977	5.800-25.000
Metric			
Cross Section (U)	Axial Seal Length (H)	Axial Gland Length (L)	Stem Range
5 mm	12.8	13.5	11-26
10 mm	25.6	26.6	43-136
15 mm	38.3	39.7	93-358
20 mm	51.1	52.7	161-715



Benefits

- Self-adjusting
- No live loading
- Low friction
- Reduced fugitive emissions
- Application in hostile chemical environments
- Broad temperature range capabilities

