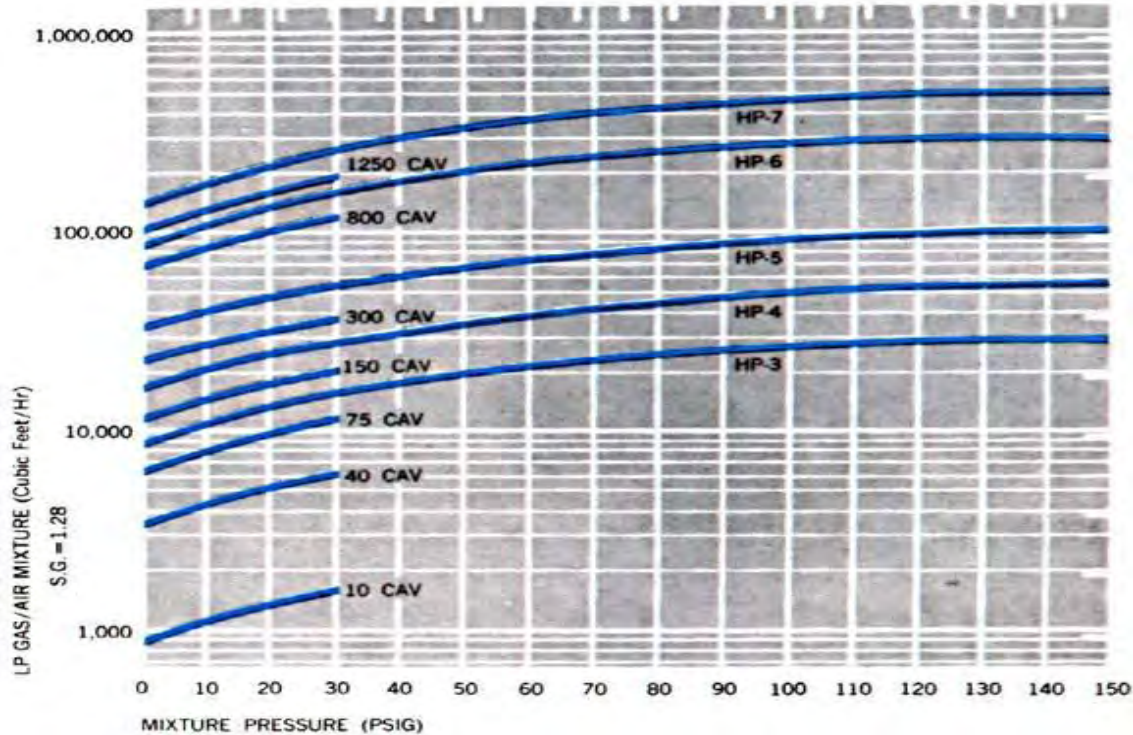


Selas Gas Blender Valves Selection Guide

Selas Gas Blenders are offered for all ranges indicated in Fig. 5. Blender valves 10 through 1250 are limited to a maximum outlet pressure of 30 psig. Blenders HP3 through HP7 are capable of supplying mixtures up to 150 psig.

For propane/air mixture with a S.G. of 1.28, selection can be made directly from Fig. 5. Whenever mixtures with other than S.G. of 1.28 are mixed, a correction factor (see Fig.6) must be used before selecting blender from Fig. 5.

Fig. 5



Example:

Requirement is to obtain blend of butane and air (S.G. of 1.46). Flow of 100,000 ft³/hr. at 120 psig is desired.

Metric Conversions:

1kPa=0.145 psig

1 Nm³/hr.=38.04 scfh

1. Determine correction factor (F_c) as follows:

$$F_c = \sqrt{\frac{1.46}{1.28}} = 1.068$$

$$Q_{\text{corrected}} = 100,000 \times 1.068 = 106,800 \text{ ft}^3/\text{hr. @ S.G. 1.28}$$

2. Using Fig. 5, blender valve HP 5 is selected.

S.G.	$F_c = \sqrt{\frac{\text{S.G. (MIXTURE)}}{1.28}}$
0.2	0.40
0.4	0.56
0.6	0.68
0.8	0.79
1.0	0.88
1.2	0.97
1.4	1.05
1.6	1.12
1.8	1.19