Schlumberger

Low Gas Flow Metering Skid (LGMS)

Accurately measures low gas flow rates and meters rates outside the measuring envelope of the separator

Applications

Meters low gas flow rates that are normally outside the measuring envelope of the separator

How it improves wells

Enables the operator to accurately measure quantities

How it works

The LGMS is a low gas flow metering skid that mounts on the gas outlet of a test separator and meters low gas rates that are normally outside the separator's operating envelope. It consists of a Coriolis meter or an orifice meter with BARTON* measurement technology recorder.

Options

The high-temperature ball valve kit available for the low gas metering skid (LGMS-F) increases the maximum working temperature to 125 degC [257 degF].

The takeaways

Seamless pressure control reinforces measurement accuracy and operational safety.

- Pressure control valve
- Bypass line mounted on the skid
- Metering options of Coriolis meter or an orifice meter with BARTON technology
- All models come with a quality file record that outlines specifications, and a certificate of conformity from the manufacturer.



Low gas flow metering skid.

Specifications				
Model	LGMS-B	LGMS-C	LGMS-F	LGMS-FB
Working pressure at 212 degC [100 degF], psi [kPa]	1,480 [10,204]	1,480 [10,204]	1,440 [9,930]	1,440 [9,930]
Working temperature, degC [degF]	0 to 100 [32 to 212]	-20 to 100 [-4 to 212]	0 to 100 [32 to 212]	-29 to 100 [-20 to 212]
Meter type	2-in orifice	2-in orifice	Coriolis (CMF100)	Coriolis (CMF100)
Gas flow envelope, Mscf/d	1-10 with 0- to 100-in	1–10 with 0- to 100-in [0- to 2,540-mm] WC range spring	Min.: 14.126	Min.: 14.126
	[0- to 2,540-mm] WC range spring		530 at 50 psi [345 kPa] (5-psi [34 kPa] pressure drop)	530 at 50 psi [345 kPa] (5-psi [34 kPa] pressure drop)
	30—160 with 0- to 200-in [0- to 5,080-mm] WC range spring	30—160 with 0- to 200-in [0- to 5,080-mm] WC range spring	3,530 at 1,200 psi [8,273 kPa] (11 psi [76 kPa] pressure drop)	3,530 at 1,200 psi [8,273 kPa] (11 psi [76 kPa] pressure drop)
Connections				
Inlet	3-in Fig 602 F	3-in Fig 602 F	3-in Fig 602 F	3-in Fig 602 F
Outlet	3-in Fig 602 M	3-in Fig 602 M	3-in Fig 602 M	3-in Fig 602 M
Footprint, m [ft]	3.60 × 0.90 [11.8 × 2.95]	3.60 × 0.90 [11.8 × 2.95]	1.62 × 0.50 [5.3 × 1.64]	1.62 × 0.50 [5.3 × 1.64]
Height, m [ft]	1.81 [5.9]	1.81 [5.9]	1.6 [5.25] [†]	1.6 [5.25] [†]
Weight, kg [lbm]	430 [948]	430 [948]	380 [838]	380 [838]
Applied codes	ASME [‡] VIII, ANSI B31.3, NACE MR0175 (H ₂ S)	ASME VIII Div. 2, ANSI B31.3, NACE MR0175 ($\rm H_2S$)	ASME VIII, ANSI B31.3, NACE MR0175 (H ₂ S), CENELEC EEx ia & d, CENELEC EEx SYST (Group IIB, class T4)	ASME VIII, ASME B31.3, NACE MR0175($\rm H_2S$), $\rm CE^{s}$ marked

[†] Depending on position of adjustable legs

[‡] American Society of Mechanical Engineers

[§] Conformité Européene