

# IRD Probe Regulator



REGULATE



SAMPLE



CONDITION

API 14.1

GPA  
2166

ISO  
10715



The Welker Original IRD Probe Regulator delivers a continuous supply of representative samples to an analyzer at the appropriate pressure for real-time natural gas analysis of high-volume lines.

**ORIGINAL**

## Features

- Fixed insertion length
- Pressure-regulating probe tip with thermal fins
- Low internal volume
- Multiple pressure control ranges
- Welker Spring Range Kit (IRD-4SS option)

## Benefits

- Collect representative samples from the center one-third of the pipeline
- Regulation point in the pipeline
- Mitigate the Joule-Thomson effect and prevent sample condensation
- Reduced lag time
- Real-time sample analysis
- Adaptable to pressure requirements of downstream analyzer
- Easily swap springs to change the output pressure range for a new application or downstream device (IRD-4SS option)



## SPECIFICATIONS

### IRD PROBE REGULATOR

Materials of Construction	316/316L Stainless Steel, Kel-F®, PTFE, and Viton® Others Available
Connections	<b>Outlet:</b> ¼" FNPT <b>Pipeline:</b> ½", ¾", 1" or 2" MNPT
Output Range	<b>IRD-1:</b> 75-200 psig (5-13 barg) <b>IRD-2:</b> 100-500 psig (6-34 barg) <b>IRD-4:</b> 0-25 psig (0-1.7 barg); 0-50 psig (0-3.4 barg); 20-100 psig (1.3-6 barg); or 75-200 psig (5-13 barg) <b>IRD-6:</b> 250-1500 psig (17-103 barg)
Insertion Length	2.2" Standard for 2" and 3" Pipe 3.6" Standard for 4" and 6" Pipe 5.9" Standard for 8", 10", and 12" Pipe
Flow Coefficient (C <sub>v</sub> )	<b>IRD-1, IRD-2, and IRD-6:</b> 0.092 <b>IRD-4:</b> 0.138
Operation	<b>IRD-1 and IRD-4:</b> Diaphragm-Operated <b>IRD-1, IRD-2, and IRD-6:</b> Piston-Operated
Operating Pressure	<b>IRD-1, IRD-2, and IRD-6:</b> 5000 psig @ -20 °F to 100 °F (344 barg @ -28 °C to 37 °C) <b>IRD-4:</b> 3600 psig @ -20 °F to 100 °F (248 barg @ -28 °C to 37 °C)

\* Downstream Relief Required

Weight and/or dimensions are approximate.  
Specifications subject to change without notice.



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