RENISHAW®
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Interpolators with single-ended input

Two variants of the RGE interpolator are designed to accept either 1 Vpp or 4 Vpp single-ended analogue inputs:
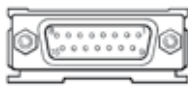
A-9539-2245

4 Vpp single-ended analogue input, x 5 interpolation factor, 20 MHz RS422A square wave output signals in quadrature.

A-9539-2246

1 Vpp single-ended analogue input, x 25 interpolation factor, 20 MHz RS422A square wave output signals in quadrature.

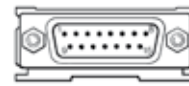*For full specification see Data sheet L-9517-0188.*

Input

Connector   15 pin sub D, socket

Signal   Input from 1 Vpp / 4 Vpp analogue readhead.

Function	Signal	15 pin D type
Power (output)	5 V	4, 5
	0 V	12, 13
Incremental signals	V_1	1
	V_2	2
Reference mark	V_0	3
Reference voltage	V_{ref}	9, 10, 11
Limit switch	V_q	8
Reserved	Do not connect	6, 7, 14
Shield	Inner	15
	Outer	Case

NOTE: The presence of limit switch and reference mark signals is dependent on the type of head used.

Output

Connector   15 pin sub D, plug

Signal   RS422A square wave signals in quadrature.

Function	Signal	15 pin 'D' type
Power (input)	5 V	7/8
	0 V	2/9
Incremental signals	A+	14
	A-	6
	B+	13
	B-	5
Reference mark	Z+	12
	Z-	4
Limit switch	Q	10
Alarm	E+	11
	E-	3
External set-up	X	1
None	Not connected	15
Shield	Outer	Case

M-9539-2247-01