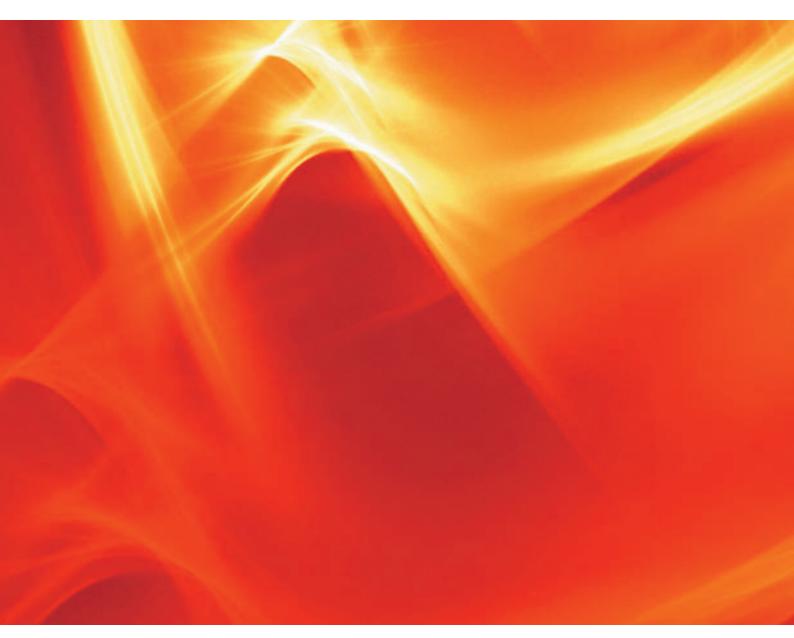
Portable Calibration Unit



Test and Calibration Gas Carrying Pouch

for LAMTEC Sensors and Measuring Systems



1 Technical Data Portable Calibration Unit

1.1 Carrying Pouch for 3 Test and Calibration Gas Cylinders



Fig. 1-1 Pouch

Dimensions carrying pouch for 3 test and calibration gas cylinders		
Dimensions (HxWxD) [mm]/[in.]	400x380x125/15.75x14.96x4.92	
Weight [kg]/[lb]	0,7/1.55	
Material	Polyester	

1.2 Test and Calibration Gas (single use)



Fig. 1-2 Test and calibration gas cylinders (single use)

Dimensions Test and Calibration Gas Cylinders (single use) with Test Gas A, B, C		
∅ [mm]/[in.]	90/3.543	
High [mm]/[in.]	370/14.57	
Volume [l]	1.6	
Capacity [l] at 70 bar	112	
Tare weight [kg]/[lb]	1.2/2.645	
Pressure [bar/psi]	70/1000	
Material	Aluminium ISO11118	
Valve protection	Plastic cap	
Valve outlet	5/82" 18 UNF C10	
Gas composition	see table	
Typical durability	3 years	
Typical composition tolerances	± 2 %	

Test gases for test and calibration gas cylinders (single use)

	Composition		
Test gas	O ₂ [Vol.%]	CO _e [ppm]*	N ₂ [Vol.%]
Α	21	0	Rest
В	3	0	Rest
С	3	300	Rest

^{*} CO Equivalent CO_e is the sum of all components in the exhaust gas. In test gases, it is represented by CO and H2 in proportion of 2:1, e.g. 300 ppm COe = 300ppm CO_e = 200 ppm CO +100 ppm H₂.

1.3 Flow Regulator with Test Gas Hose





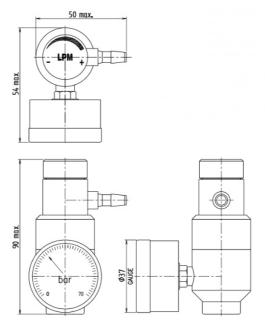


Fig. 1-4 Dimensional drawing flow regulator

Dimensions		
Dimensions (HxWxD) [mm]/[in.]	90x50x54/3.543x1.97x2.126	
Weight [kg]/[lb]	0.315/0.695	
Material (Body / Gasket / Valve seat)	Chrome plated brass / Viton/ Teflon 5	
Input Data		
Test gas inlet	5/8" 18 UNF C10	
Test gas outlet	3/16" hose nipples	
:Flow (variable with 9 steps)	0,5 – 5,0 l/min	
Typical accuracy (with cylinder pressures between 3,5-70 bar / 50-1000 psi)	± 12 % of measured value	
Pressure range when instrument air adapter is connected (in bar/psi)	permissible: 0 7/0101	
	recommended:	
	3 4/4358	
Dimensions Test Gas Hose	<u> </u>	
Dimension (Dxd) [mm]/[in.]	6x3/0.237x0.118	
Length [m]/[in.]	1/39.37	
Weight [kg]/[lb]	0,03/0.062	
Material	Silicone	

1.4 Instrument Air Adapter for Flow Regulator



Fig. 1-5 Instrument air adapter for flow regulator

Dimensions Instrument Air Adapter			
Dimensions (HxWxD) [mm]/[in.]	40x22x19/1.575x0.866x0.748		
Weight [kg]/[lb]	0.042/0.093		
Material	Stainless steel/brass nickel-plated		
Pressure range when instrument air adapter is connected (in bar/psi)	permissible: 0 7/0101		
	recommended: 3 4/4358		
Dimensions Hose			
Dimension (Dxd) [mm]/[in.]	6x4/0.237x0.158		
Length [m]/[in.]	1/39.37		
Weight [kg]/[lb]	0,02/0.044		
Material	PUN		

2 Order Information

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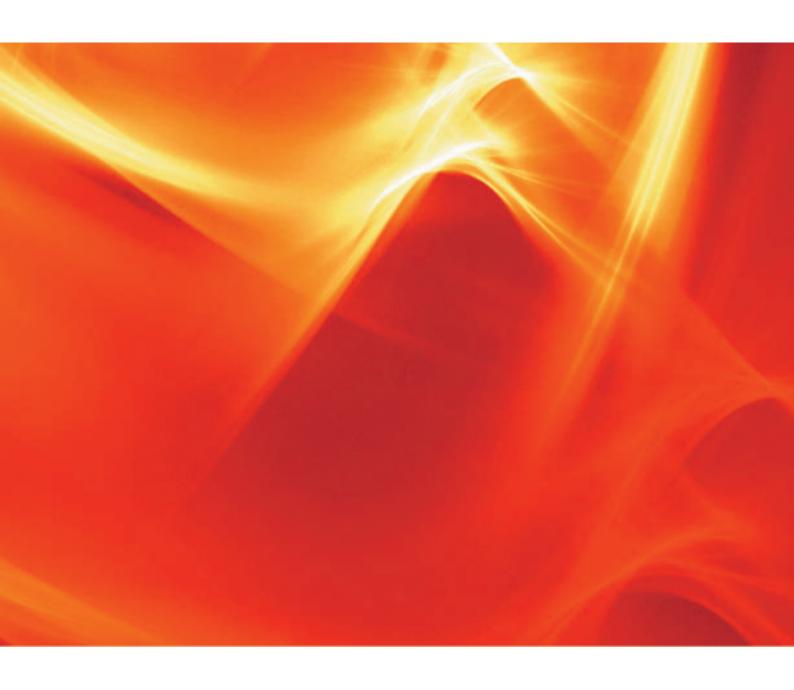
Description	Order no.
Portable calibration unit for LS2 probe all types, as set including:	699R0060
 1 piece bag for portable calibration unit (max. 3 disposable aluminium cylinder) 	
 1 piece flow controller with adjustable flow rate for disposable test gas aluminium cylinder 	
 1 piece instrument air adapter for flow controller 	
- 1 piece test gas hose 6/3 mm/0.237x0.118 in. material silicon, length 1 m/39.37 in.	
 1 piece Compressed air hose (6x4 mm/0.237x0.158 in., material PUN, length 1 m/39.37 in. 	
$-$ 1 piece test gas 3 % $\rm O_2$; balance $\rm N_2$ in aluminium disposable cylinder 1.6 l/70 bar	
Portable calibration unit with synthetic air for LS2 probe all types, as set including:	699R0061
 1 piece bag for portable calibration unit (max. 3 disposable aluminium cylinder) 	
 1 piece flow controller with adjustable flow rate for disposable test gas aluminium cylinder 	
 1 piece instrument air adapter for flow controller 	
- 1 piece test gas hose 6/3 mm/0.237x0.118 in., material silicone, length 1 m/39.37 in.	
 1 piece compressed air hose 6x4 mm/0.237x0.158 in., material PUN, length 1 m/39.37 in. 	
- 1 piece synthetic air for offset calibration in aluminium disposable cylinder 1.6 l / 70 bar	
$-$ 1 piece test gas 3 $\%$ O $_2$; balance N $_2$ in aluminium disposable cylinder 1.6 l/70 bar	
Portable calibration unit for KS1/KS1D probe all types, as set including:	699R0062
 1 piece bag for portable calibration unit (max. 3 disposable aluminium cylinder) 	
 1 piece flow controller with adjustable flow rate for disposable test gas aluminium cylinder 	
 1 piece instrument air adapter for flow controller 	
- 1 piece test gas hose 6/3 mm/0.237x0.118 in. material silicone, length 1 m/39.37 in.	
 1 piece compressed air hose 6x4 mm/0.237x0.158 in., material PUN, length 1 m/39.37 in. 	
 1 piece test gas 3 % O₂; balance N2 in aluminium disposable cylinder 1.6 l/70 bar 	
 1 piece test gas 3 % O₂; 200 ppm CO; 100 ppm H₂; balance N₂ in aluminium disposable cylinder 1.6 I/70 bar 	
Portable calibration unit with synthetic air for KS1/KS1D probe all types, as set including:	699R0063
 1 piece bag for portable calibration unit (max. 3 disposable aluminium cylinder) 	
 1 piece flow controller with adjustable flow rate for disposable test gas aluminium cylinder 	
 1 piece instrument air adapter for flow controller 	
- 1 piece test gas hose 6/3 mm/0.237x0.118 in. material silicone, length 1 m/39.37 in.	
 1 piece Compressed air hose 6x4 mm/0.237x0.158 in., material PUN, length 1 m/39.37 in. 	
 1 piece Synthetic air for offset calibration in aluminium disposable cylinder 1,6 l/70 bar 	
$-$ 1 piece test gas 3 $\%$ O $_2$; balance N2 in aluminium disposable cylinder 1,6 l/70 bar	
 1 piece test gas 3 % O₂; 200 ppm CO; 100 ppm H₂; balance N₂ in aluminium disposable cylinder 1.6 I/70 bar 	

2 Order Information

2.1 Spare Parts

Description	Order-No.
Carrying pouch for 3 test and calibration gas cylinders	650R1017
Test and calibration gas cylinders A (Aluminium single use cylinder with test gas A: 21 Vol.% O ₂ , Rest N ₂)	650R1020
Test and calibration gas cylinders B (Aluminium single use cylinder with test gas B: 3 Vol.% O ₂ , Rest N ₂)	650R1022
Test and calibration gas cylinders C (Aluminium single use cylinder with test gas C: 3 Vol.% O_2 , 300 ppm CO_e^* , Rest N_2)	650R1021
Flow regulator with hose connection (with adjustable flow rate for test and calibration gas cylinders.	650R1016
Test gas hose (6x3 mm/0.237x0.118 in., silicone, length 1 m/39.37 in.)	650P0726
Instrument air adapter for flow controller	650R1018
Compressed air hose (6x4 mm/0.237x0.158 in., PUN, length 1 m/39.37 in.)	657P0547

^{*} CO Equivalent CO_e is the sum of all components in the exhaust gas. In test gases, it is represented by CO and H_2 in pro-portion of 2:1, e.g. d.h. 300 ppm CO_e = 200 ppm CO +100 ppm H_2 .



The information in this publication is subject to technical changes.



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