



INSTRUMENTATION & GAUGES

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INSTRUMENTATION & GAUGES



BHA Pressure Gauges

FEATURES:

- **APPLICATION** For gaseous and liquid media, which are not highly viscous
- **CONSTRUCTION** Stainless steel case with brass movement and copper alloy bourdon tube
- **SIZES** Standard sizes are 63mm with 1/4" BSPP thread and 100mm with 1/2" BSPP thread. Other sizes and threads available on request
- **CONFIGURATION** Rear entry (panel mount using a rear clamp or flange mount). Bottom entry (stem mount)
- **ACCURACY** 1 to 1.5%
- **TYPE OF FLUID** Glycerine (99.5%)
- **PRESSURE RANGES** Vacuum to 1000 bar

Note: Please refer to page 121 for ordering information



BHA Diagnostic Test Kit

The new BHA Diagnostic Test Kit is ideal for testing pressures in the field. The kit is contained in one of the toughest carry cases in the industry - it is unbreakable, lockable, water tight, corrosion-proof, dent-proof and airtight. Additionally, while it is built for tough field conditions, the case is also convenient and light weight.

Part Number	Contents
TESTKIT-2	
TESTKIT-4	Standard Kits contain 2,4,6 or 8 gauges plus
TESTKIT-6	a range of adaptors and microbore hose
TESTKIT-8	

Note: Other diagnostic tools/kits available on request.



BHA Connectors and Accessories (BHA C&A) was established in 2003 to provide a comprehensive range of hose and fittings along with low cost accessory products to Australian industry.

BHA stocks a comprehensive range of high pressure hydraulic hose, fittings, adaptors and accessories. A complete hose and fittings supply service is offered including the assembly of hoses and packaging into kit form. BHA C&A imports and takes to market premium high pressure hydraulics hose from Manuli, who are universally recognised for high-performance, superior quality and durability. BHA C&A's range of fittings and adaptors is sourced from manufacturers around the globe. These include swage fittings, field attachable fittings and adaptors.

BHA C&A is located in Sydney and offers fast efficient same day service on all stock items. It also supplies hose assembly machinery and associated tooling including assembly gauges.



ORDERING INFORMATION FOR PRESSURE GAUGES:

3	2	3	-	1	1	-	2	2	2	-	250^{P/B}
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Nominal Size	Basic Application	Type of Case	Material of Case	Material of Connector	Type of Connector	Size of Connector	Type of Liquid	Pres. Range and Scale

	Special	Special	Special	Special	Special	Special	Special	Special	Special	Pressure Range
1	40mm	General	Bottom Mount without Flange	Steel Black	Brass	PF (BSPP)	1/8"	Dry		-1 to +1000bar
2	50mm	Crimped on Bezel	Bottom Mount with back Flange	Stainless Steel	Plated Brass	PT (BSPT)	1/4"	Glycerin		Scale and Code PSI/bar/Kpa = P/B
3	63mm	Push Twist Removable Bezel	Lower Back Mount without Flange	Brass	Stainless Steel	NPT	3/8"	Silicone 100Ø		kg/PSI = K/P
4	75mm	Push Twist Removable Bezel Zero Adjusted Pointer	Centre Back Mount without Flange	Steel Cap Chrome Case Black		UNF	1/2"	Silicone 100Ø		PSI/Kpa = P/K
5	100mm	Electric Contact Point on/off	Lower Back Mount with Front Flange	Steel Wholly Chrome			7/16"			Mpa/kg = M/K
6	150mm	Diaphragm	Centre Back Mount with Front Flange						Type of Electric Contacts	Single Contact Point
7			Lower Back Mount without Flange with L Bracket							Double Contact Point off/on
8			Centre Back Mount without Flange with U Bracket							Double Contact Point off/off

Equivalent Table of Pressure Ranges

Unit	bar	mbar	kbar	Pa	kPa	MPa	psi	atms	Ft.Hd. H ₂ O at 20°CXC	in H ₂ O	Kg/cm ²	Metres H ₂ O	in Hg. at 20°CXC	mm Hg.	cm Hg.	bar	Millibar (mbar)	kPa
1bar	1	1000	0.001	10 ⁵	100	0.1	14.696	0.0680	2.310	27.720	0.0700	0.704	2.043	51.884	5.188	0.0690	68.947	6.895
1mbar	0.001	1	10 ⁻⁶	100	0.1	10 ⁻⁴	0.433	0.0290	1	12.000	0.0300	0.305	0.884	22.452	2.245	0.0300	29.837	2.894
1kbar	1000	10 ⁶	1	10 ⁸	10 ⁵	100	0.036	0.0025	0.833	1	0.0025	0.025	0.074	1.871	0.187	0.0025	2.486	0.249
1Pa	10 ⁻⁵	0.01	10 ⁻⁸	1	0.001	10 ⁻⁶	14.233	0.9680	32.867	394.408	1	10.018	29.054	737.959	73.796	0.9810	980.662	98.066
1kPa	0.01	10	10 ⁻⁵	1000	1	0.001	1.422	0.0970	3.287	39.370	0.0990	1	2.905	73.796	7.379	0.0980	98.066	9.807
1MPa	10	10 ⁴	0.01	10 ⁶	1000	1	0.489	0.0330	1.131	13.575	0.0340	0.345	1	25.400	2.540	0.0340	33.753	3.375
							0.019	0.0013	0.045	0.534	0.0014	0.0136	0.039	1	0.100	0.0010	1.329	0.133
							0.193	0.0131	0.445	5.340	0.0140	0.1360	0.393	10.000	1	0.0133	13.290	1.328
							14.503	0.9870	33.514	402.164	1.0200	10.2110	29.625	752.470	75.247	1	1000.0	100.00
							0.014	0.0009	0.033	0.402	0.0010	0.0102	0.029	0.752	0.075	0.001	1	0.100
							0.145	0.0098	0.335	4.021	0.0100	0.1020	0.296	7.525	0.752	0.010	10.000	1

1Pa = 1N/m² 1kPa = 1kN/m² 1MPa = 1MN/m²

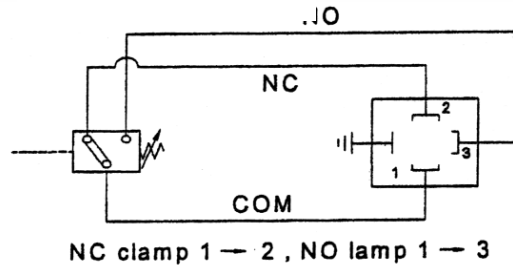


PRESSURE SWITCHES



HYSTAR® Pressure Switch

GRAPHIC SYMBOL



Model	Pressure Adj. Range bar	Surge Pressure bar	Weight Kg
040K	6-40	150	0.6
070K	5-70	200	0.6
150K	30-150	300	0.6
250K	40-250	300	0.6

ORDERING INFORMATION:

DNB - 150K - 22B
(1) (2) (3)

(1) MODEL TYPES

DNB = General type

(2) PRESSURE ADJUSTMENT RANGE

In bar

(3) DESIGN LETTER

22B = 1/4"PT
22B80 = 1/4"PF
22B90 = 1/4"NPT



MEASURING EQUIPMENT

BHA In-Line Flow Indicators - IFM Series

FEATURES:

- Select from aluminium, brass or stainless steel to meet system and liquid requirements.
- Allows the designer to install the monitor in any orientation - horizontal, vertical or inverted.
- Weather-tight for use outdoors and/or on systems where wash downs are required.
- A sharp-edged orifice provides excellent measurement stability to a minimum of 500 SSU.
- Designed as a hydraulic service tool, this monitor will provide years of maintenance free performance.
- The magnetically coupled follower design allows operation to 6000 PSIG and use with opaque liquids.
- Standard BSP Ports with NPT and SAE ports available reducing the amount of adaptors required for installation.
- Mid-scale measuring accuracy within +/- 2.5%. Full scale accuracy within +/- 4%.



ORDERING INFORMATION:

IFM A 16 30 N HT
(1) (2) (3) (4) (5) (6)

(1) TYPE	
In Line Flow Meter	
(2) CASE	
A = Aluminium (petroleum base fluid) B = Brass (water base fluid) SS = Stainless Steel (caustic fluids)	
(3) SIZE	
04	= 1/4
06	= 3/8
08	= 1/2
12	= 3/4
16	= 1
20	= 1-1/4
24	= 1-1/2
62 (for code 62)	= 1-1/2
32	= 2

(4) FLOW RATE (GPM)	
1	= available in 1/4" or 1/2"
2	= available in 1/4", 1/2", 3/4" or 1"
5	= available in 3/8", 1/2", 3/4" or 1"
10	= available in 1/2", 3/4" or 1"
15	= available in 1/2"
20	= available in 3/4" or 1"
30	= available in 3/4", 1", 1-1/4", 1-1/2", or 1-1/2" code 62
40	= available in 1"
50	= available in 1", 1-1/4", 1-1/2", 1-1/2" code 62 or 2"
75	= available in 1-1/4", 1-1/2", 1-1/2" code 62 or 2"
100	= available in 1-1/4", 1-1/2", 1-1/2" code 62 or 2"
150	= available in 1-1/4", 1-1/2", 1-1/2" code 62 or 2"

(5) THREAD TYPE	
B	= BSP
N	= NPT
S	= SAE

(6) OPTIONAL/HIGH TEMP. VERSION	
HT	= High Temperature (up to 205°C continuous)
HR	= High Temperature reverse flow
Note: Leave off HT/HR if only standard unit is required	



PFM6 Flo-check® Digital Hydraulic Test Unit

The PFM6 is a compact, lightweight, self-contained portable tester with laboratory accuracy. Designed for fast diagnostic troubleshooting of all types of mobile or stationary hydraulic systems and components. Makes all flow, pressure and temperature measurements simultaneously from one point. The helical type pressure gauge provides pulsation dampening and high over-pressure capacity. Load valve offers fingertip control of pressure to 6000 PSI, and the platinum resistance thermometer with its swept wet well, is fast and accurate. The unit is available in both metric and imperial units.

Note: Please refer to page 125 for features & ordering information



PFM6BD Flo-check® Bi-Directional Hydraulic Test Unit

The PFM6BD is a compact, lightweight, self-contained portable tester with laboratory accuracy that offers all the benefits of the PFM6 series in a unit designed for fast inline testing of bi-directional motors, servo systems and valves. The Flo-check series has the lowest pressure drop of any bi-directional tester on the market.

Note: Please refer to page 125 for features & ordering information



PFM8 Flo-check® Digital Hydraulic Test Unit and Dynamometer

The PFM8 is completely digital, offering a front panel with selectable U.S. or metric readings. Its portable dynamometer reads both HP and kW power directly. A large, easy to use membrane switch selects flow, temperature, pressure or power. The unit automatically turns itself off after five minutes if there is no flow signal, saving power and wear and tear. Its low noise input circuitry provides steadier readings when flow is pulsating or cavitating. In addition to offering the standard features of the PFM6 model, it also features a silicon strain gauge pressure sensor.

Note: Please refer to page 125 for features & ordering information



The Flo-Tech and Hedland divisions of Racine Federated has been a market leader in hydraulic diagnostic equipment and turbine flow measurement for more than 40 years.

Berendsen Fluid Power is pleased to distribute the FloTech/Hedland series of portable hydraulic testers, which feature sophisticated electronics for fast, accurate diagnostic troubleshooting of hydraulic systems.

As further testimony to the market leadership of Flo-Tech/Hedland, they also distribute a comprehensive range of non-intrusive ultrasonic flow meters, flow transmitters, and digital displays and signal processors (for use with turbine flow sensors).

All of this equipment has been engineered to perform to the highest specifications with ease and simplicity of use being paramount features.



FEATURES:

- Simple to operate
- Accurate within $\pm 1\%$ full range
- Fast response turbine flow sensors
- A single toggle switch which controls power, flow and temperature
- Provide large 3½ digit LCD for both flow and temperature
- All flow, pressure and temperature measurements are simultaneously made from one point
- Compact, lightweight and self-contained for portability
- Come with a pressure rating of 6000 PSI (414 bar) maximum
- Operating temperatures up to 150°C
- Come standard with pressure relief disc protection
- Low battery/over-range indicators
- Can be supplied with 5-point or 10-point Calibration Certificates
- CE certified models are available in PFM6 and PFM6BD series units

ORDERING INFORMATION:

Order Code	Part Number	Flow (gpm)	Flow (lpm)	CE Avail.	Reverse Flow	Power hp (kW)	Pressure Scale bar	Pressure Scale kg/cm ²	Pressure Scale MPa	Pressure Scale psi	Nominal Size
PFM6-15	F5110-XXX	(1-15)	4-56	3	-	-	3	3	3	3	G3/4BSPP
PFM6-30	F5111-XXX	(2-30)	7.5-113.6	3	-	-	3	3	3	3	G3/4BSPP
PFM6-60	F5112-XXX	(3-60)	12-227	3	-	-	3	3	3	3	G1BSPP
PFM6-85	F5113-XXX	(4-85)	15-321	3	-	-	3	3	3	3	G1BSPP
PFM6-200	F5114-XXX	(7-199.9)	26-757	3	-	-	3	3	3	3	G1-1/2BSPP
PFM6BD-60	F5082-XXX	(3-60)	12-227	3	3	-	3	3	3	3	SAE16
PFM6BD-85	F5083-XXX	(4-85)	15-321	3	3	-	3	3	3	3	SAE16
PFM6BD-200	F5084-XXX	(7-199.9)	26-757	3	3	-	3	3	3	3	SAE24
PFM8-15	F5061	(1-15)	4-56	-	-	52.5 (39)	Front panel selectable			SAE12	
PFM8-30	F5058	(2-30)	7.5-113.6	-	-	105 (78)	Front panel selectable			SAE12	
PFM8-60	F5052	(3-60)	12-227	-	-	210 (157)	Front panel selectable			SAE16	
PFM8-85	F5053	(4-85)	15-321	-	-	298 (222)	Front panel selectable			SAE16	
PFM8-200	F5054	(7-199.9)	26-757	-	-	700 (522)	Front panel selectable			SAE24	



HEDLAND HTTF Transit Time Ultrasonic Flow Meter

The non-invasive HTTF Series uses the proven time-of-flight (TOF) principle of utilising two transducers to function as both ultrasonic transmitters and receivers to provide accurate bi-directional flow measurement. It can be clamped onto the outside of carbon steel, stainless steel, copper, and plastic tubing in sizes from 1/2" to 2", and up to 100" (2540mm) for remote versions.

FEATURES:

- Unaffected by up to 40% suspended solids or gas pockets
- Can handle liquid temperatures from -20°C to +85°C
- Weatherproof enclosure
- Available with or without local display
- Direct interface provided for integrated data collection systems to measure forward total, reverse total and net total

ORDERING INFORMATION:

Order Code	Version	Type	ANSI Pipe, Copper, Tubing
HTTFX-XX1-NN	Integral System		Imperial & Metric sizes up to 2" (63mm)
HTTSXX-XXX-XXXX	Remote System (small pipe transducer)		1/2", 3/4", 1", 1 1/4", 1 1/2", 2"
HTTN-XXX-XXXX-N	Remote System	Standard	2" up to 100"
HTTH-XXX-XXXX-H	(large pipe transducer)	Hi-temp	2" up to 100"

Note: A remote system consists of one HTTF number and a choice of either a HTTS, HTTN, or HTTH transducer

TYPICAL APPLICATIONS:

- Up to 2" - Standard hydraulic systems
- Up to 4" - Low flow, high volume lube systems
- 4 to 100" - Water/sewerage treatment plants, cooling water circulation



HEDLAND MR Series Flow Transmitters

The MR Flow Transmitter is a variable-area flow meter providing an inbuilt digital display of both flow rate and total accumulated flow. The meter uses non-contact sensor electronics (has no magnetic couplings or mechanical linkages) making it suitable for high-cycle, transient-flow applications. Calibration parameters such as pressure, temperature, and specific gravity compensation for water, petroleum, and pneumatic applications are field adjustable using configurable soft switches, even though it comes pre-calibrated.

FEATURES:

- Digital display of rate and total flow
- 4-20 mA loop-powered
- Absolute linear positioning sensing
- Suitable for rugged environments
- 10 point linearisation
- 0-5 or 0-10 Vdc outputs
- High reliability and accuracy
- Insensitive to shock and vibration



ORDERING INFORMATION:

Order Code	Flow Range lpm	Size	Aluminium	Brass	Stainless Steel
H202X-XXX-MR	0.5 to 7.5	1/4"	3500 PSI	3500 PSI	6000 PSI
H602X-XXX-MR	0.5 to 56	1/2"	3500 PSI	3500 PSI	6000 PSI
H702X-XXX-MR	1 to 115	3/4"	3500 PSI	3500 PSI	5000 PSI
H762X-XXX-MR	1 to 190	1"	3500 PSI	3500 PSI	5000 PSI
H802X-XXX-MR	10 to 560	1 1/4"	3500 PSI	3500 PSI	5000 PSI
H862X-XXX-MR	10 to 560	1 1/2"	3500 PSI	3500 PSI	5000 PSI

Note: 31 different individual models, with various flow ranges available.

Also Available As: Flow-Alert™ Flow Switches (single or double switch), Flow-Alert™ Reed Switches (reed switch 1 or 2, NO or NC)



Digital Displays / Signal Processors

The F6600/F6650 digital display is ideal for applications such as remote flow monitoring, comparing rates of flow, alarm system, process control. It accepts inputs from Ultima and Classic turbine flow sensors as well as sources such as switch contacts, outputs from CMOS/TTL circuits, and magnetic pick-ups. Model F6700/F6750 is similar to the F6600 for use with Flo-tech Activa sensor arrays. It accepts standard 4-20mA or 0-10VDC analog signals.

The panel-mounted HB2800 display is for use with the Ultima and Classic flow sensors, and will accept non-amplified low-level frequency input and calculate rate of flow/total flow. Two models are available – a standard unit for basic rate/flow applications and an advanced unit with additional programming options.



FEATURES:

- AC or DC versions
- NEMA 4X/IP65 enclosure
- CE compliant

ORDERING INFORMATION

FOR F6600/F6650 & F6700/F6750:

F6700 - B - D - L
(1) (2) (3) (4)

(1) DISPLAY

F6700 = AC
F6750 = DC
F6600 = AC
F6650 = DC

(2) ANALOG OUTPUT

A = 4-20mA
B = 0-20mA
C = 0-10VDC
X = none

(3) COMMUNICATION

A = RS232
B = RS485
C = Modbus
D = Profibus
E = Device Net
X = none

(4) DISPLAY UNITS

G = gpm
L = lpm
R = rpm
P = psi*
B = bars*
K = kg/cm²*
M = MPa*
F = °F*
C = °C*

* Indicates not available with F6600 & F6650 series

ORDERING INFORMATION

FOR HB2800:

Order Code	GPM	LPM	Customer Selectable	Battery Powered	Loop Powered	Standard Display	Advanced Display
HB28BPAB	3			3		3	
HB28SLPAB	3				3	3	
HB28ABPAB	3			3			3
HB28ALPAB	3				3		3
HB28SBPHB		3		3		3	
HB28SLPHB		3			3	3	
HB28ABPHB		3		3			3
HB28ALPHB		3			3		3
HB28ABPCS			3	3			3
HB28ALPCS			3		3		3

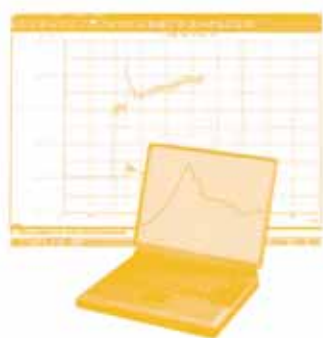


HYDROTECHNIK TEST WITH CONFIDENCE **Multi-Handy 2042**

The new Multi-Handy 2042 is the ideal unit for production line testing or for the service engineer where a straightforward test is required with peak storage during routine measurements and daily checks. It has all the same field proven features of the original 2040 but with the addition of full ISDS functionality and an online memory transfer facility which allows users to log data directly to their PC and analyse with the HydroWIN software package. HydroWIN allows for detailed zoom, spot, overlay and archive creation features. This is undoubtedly one of the most powerful hydraulic diagnostic software packages available today.

FEATURES:

- Calculation of 2 measuring signals for sum and pressure difference
- 2 analog measuring inputs for 4 to 20 mA or 0 to 20 mA – measuring signals
- Online measuring value detection and storage via PC / laptop
- Max. 3 measuring values can be displayed
- Operation with 8 line display
- Automatic display modification
- Min. / Max. display
- 10 bit converter
- Battery / external power supply, 12 to 30 VDC or 24 to 30 VDC*
- Hydrocomsys WIN is not included
- Battery warning display



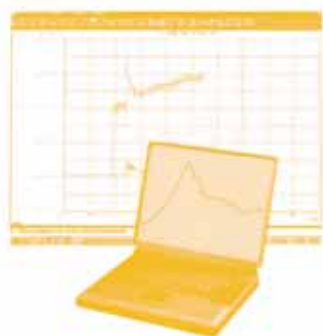
HYDROTECHNIK TEST WITH CONFIDENCE **Multi-Handy 3010**

The new Multi-Handy 3010 is the smarter version of the 2042, and packed with all the same useful functions but with an additional frequency input and substantial datalogging memory capacity. It has the same ISDS compatibility, which means that all the calibration data is sent automatically by the sensor to the unit when it is connected, saving time and eliminating the chance of any programming error.

FEATURES:

- Max. 115,000 analog or 38,333 frequency measuring values / 5 series of measurement
- Calculation from different measuring signals for sum, pressure difference, performance etc
- 2 analog measuring inputs for 4 to 20 mA or 0 to 20 mA – measuring signals
- 1 frequency input Min. / Max. display
- Operation with 8 line display via menu or function keys
- Max. 4 measuring values can be displayed
- Automatic display modification
- RS232 interface optional via USB – adaptor
- Input of trigger values and pre-trigger
- Realtime Clock
- Battery / external power supply, 12 to 30 VDC or 24 to 30 VDC*
- Battery warning display
- Scanning rate 1ms
- Hydrocomsys WIN is included free of charge

Note: *For the 12V instrument external power supply is for running only. From 24 VDC onwards the battery will be charged.





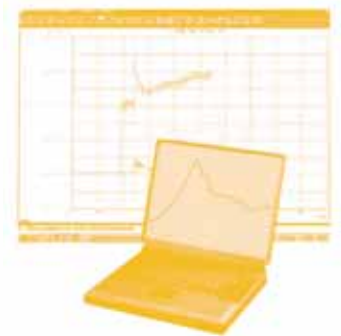
HYDROTECHNIK TEST WITH CONFIDENCE Multi-System 5050

The Multi-System 5050 is the field proven superior version of the 2042/3010 with all of their features, and boasting 6 channels with 500,000 analog or 160,000 digital values datalogging points memory. With its generous storage capacity it accommodates the lengthiest measuring process, and allows easy reproduction of stored data as a graphical protocol or as tables via a printer, immediately or at a later date, or allows for instantaneous realtime data transfer for remote monitoring. Via the HYDROcomsys software package, data integration into common applications such as Word® and Excel® is possible.

FEATURES:

- 6 channels - 2x frequency and 4x analog (0 to 20 mA or 4 to 20 mA, 0 to 10 VDC)
- 16-line LCD display for graphics and text
- Text input, Min./Max. display, display modification, calculated values & 12-bit converter
- 500,000 values/36 storage places
- Centronics-, RS232- and USB-interfaces
- Trigger/Pre-trigger and cyclical storage
- External trigger input & switching output
- Combination of two trigger conditions
- Display of graphical and text analysis
- Online-display $y=f(t)$ & $y=f(x)$
- Menu-driven operation or direct entry
- Graphical or tabular printout & date and time display
- Battery/external power supply, 12 to 30 VDC or 24 to 30 VDC*
- Scanning rate 1ms
- Hydrocomsys WIN is included free of charge

Note: *For the 12V instrument external power supply is for running only. From 24 VDC onwards the battery will be charged.



HYDROTECHNIK TEST WITH CONFIDENCE Multi-System 8050 / Multi-Control 8050

The new upgraded Multi-System 8050 is a self-contained measuring system with its own 10.4" TFT-colour display. The Multi-Control has all the same features, but without a display and needs a PC or notebook to be operated. A touch-panel can be operated directly via the display. Colour keys help the user reach their programming objective and show mistakes immediately. Data can be seen as a graphic curve directly on the screen.

FEATURES:

- 12 analog measuring inputs for 0 to 20 / 4 to 20 mA & ± 10 VDC measuring signals (2 analog inputs high-speed scanning rate 0.1ms; all other inputs 1ms)
- 4 frequency measuring inputs
- 2 measuring inputs for measuring of current & voltage ± 48 VDC / ± 2 ADC with selectable filters for PWM-driven servos
- 2 analog outputs 0 to 20mA (1x unipolar & 1x bipolar)
- 4 digital inputs to control the measuring instrument via an external signal 0 to 30 VDC
- 4 digital outputs
- 6 virtual channels, freely programmable for different, internal calculations by the user
- 64MB memory standard for 200 series of measurement, with possible expansion to 1GB
- 16 bit-converter
- RS232 interface and USB interface, remote control via Ethernet or modem
- PAGES/PASS supplementary PC software for generating measurement test runs
- Hydrocomsys WIN is included free of charge
- If you order the Multi-Control, the HT-Communicator is included free of charge



ORDERING INFORMATION: Product Range Overview

Instrument	Part Number	Total	Channels Analog	Freq.	Memory Size	USB / RS232	Graphic Displays	ISDS
Multi-Handy 2042	3160-00-68.00	2	2	0	-	- / 3	-	3
Multi-Handy 3010	3160-00-67.00	3	2	1	115,000	3 / 3	-	3
Multi-System 5050	3160-00-62.00	6	4	2	500,000	3 / 3	3	3
Multi-System 8050	3160-00-65.00	32	10	4	64Mb	3 / 3	3	3
Multi-Control 8050	3160-00-66.00	32	10	4	64Mb	3 / 3	3	3

Note:

- Analogue channels can be configured as Pressure, Temperature, Flow, Voltage, Current, etc.
- Frequency channels can be configured as either flow or RPM to read with a digital squarewave transducer output
- ISDS is the Hydrotechnik Intelligent Sensor Detection System where calibration is automatically transferred to the instrument
- Units with memory work with Hydrowin software supplied free-of-charge with all instruments



SENSORS

PRESSURE SENSOR



HYDROTECHNIK TEST WITH CONFIDENCE **HT-PD Type**

Pressure sensor with output signal 4 to 20 mA or 0 to 20 mA.
Available with ISDS.

TEMPERATURE SENSOR



HYDROTECHNIK TEST WITH CONFIDENCE **PT-100 Type**

Temperature screw-in sensor, surface sensor or immersion sensor with output signal 4 to 20 mA or 0 to 20 mA.
Available with ISDS.

TURBINE FLOW METER



HYDROTECHNIK TEST WITH CONFIDENCE **RE 4 Type**

Measuring turbines type RE 4 with f/DC converter 4 to 20 mA or with frequency output as standard.

GEAR FLOW METER



HYDROTECHNIK TEST WITH CONFIDENCE **GFM Type**

Gear flow meters type GFM with f/DC converter 4 to 20 mA or with frequency output as standard.

SPEED SENSOR INFRARED



HYDROTECHNIK TEST WITH CONFIDENCE **DS 03 Type**

Rev speed sensor (infrared) type DS03 with analog output 4 to 20 mA or with frequency output as standard.

Inductive transducer with f/DC converter 4 to 20 mA, for the scanning of gear wheels.

Note: Another option would be to use a frequency transducer (3107-00-09.00).

For more information please contact Berendsen Fluid Power.



MINI TEST FITTINGS & HOSES

BHA Test Couplings

BHA's range of mini test fittings and hoses offer a cost-effective solution to checking system pressures to 630 bar. Hose couplings, which can be finger tightened even under pressure, connect flexible micro bore hose from the system to the pressure gauge. The capillary action of the micro hose dampens pressure peaks and minimises instrument vibration. Test points installed at multiple key points in the hydraulic system allow for connection and testing of pressure throughout the system, facilitating monitoring and diagnosis. Hose end options also allow for fluid sampling, bleeding of entrapped air as well connection of alternative devices such as pressure switches and transducers.

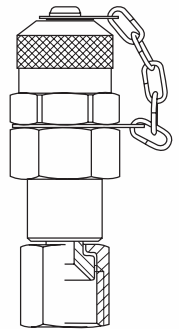
Test 12

LTC12B02	Test 12 to 1/8 BSPP, Captivated Seal
LTC12B04	Test 12 to 1/4 BSPP, Captivated Seal
LTC12B04V	Test 12 to 1/4 BSPP, Viton Seal, Captivated Seal
LTC12UN04	Test 12 to 7/16 UNF, O-Ring Seal
LTC12UN06	Test 12 to 9/16 UNF, O-Ring Seal
LTC12BT02	Test 12 to 1/8 BSPT
LTC12BT04	Test 12 to 1/4 BSPT
LTC12M10	Test 12 to 10mm, O-Ring Seal



Test 20

LTC20B02	Test 20 to 1/8 BSPP, Captivated Seal
LTC20B04	Test 20 to 1/4 BSPP, Captivated Seal
LTC20UN04	Test 20 to 7/16 UNF, O-Ring Seal
LTC20UN06	Test 20 to 9/16 UNF, O-Ring Seal
LTC20BT02	Test 20 to 1/8 BSPT
LTC20BT04	Test 20 to 1/4 BSPT
LTC20M10	Test 20 to 10mm, O-Ring Seal
LTP20UN04	Test 20 to 7/16, JIC Female
LTP20UN06	Test 20 to 9/16, JIC Female
LTP20UN08	Test 20 to 3/4, JIC Female



BHA In-Line Test Couplings

LTP20BT04	1/4 BSPT, Male Female Tee
LTP20BT06	3/8 BSPT, Male Female Tee
LTP20BT07	1/2 BSPT, Male Female Tee
LTP20BT12	3/4 BSPT, Male Female Tee
LTP20BT16	1 BSPT, Male Female Tee
LTP20BT20	1-1/4 BSPT, Male Female Tee
LTP20UN04	7/16 UNF, Male Female Tee
LTP20UN06	9/16 UNF, Male Female Tee
LTP20UN08	3/4 UNF, Male Female Tee
LTP20UN10	7/8 UNF, Male Female Tee
LTP20UN12	1-1/16 UNF, Male Female Tee



BHA Gauge Adaptors

Test 12	
LGA12B04	1/4 BSPP Gauge to Test 12 Hose
LGA12B08	1/2 BSPP Gauge to Test 12 Hose

Test 20	
LGA20B04	1/4 BSPP Gauge to Test 20 Hose
LGA20B08	1/2 BSPP Gauge to Test 20 Hose





BHA Bulkhead Gauge Adaptors

Test 20

LGA20B04B
LGA20B08B

1/4 BSPP Gauge to Test 20 Hose
1/2 BSPP Gauge to Test 20 Hose



BHA Change Over Adaptors

LCA12-20
LCA20-12

Test 12 Male to Test 20 Female
Test 20 Male to Test 12 Female



BHA Joiners

LCJ12
LCJ20

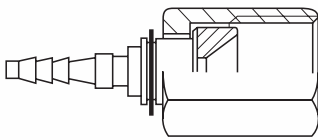
Test 12 Joiner Male x Female
Test 20 Joiner Male x Female



BHA Direct Gauge Adaptor

LCD20B04
LCD20B08

Test 20 to 1/4 BSPP Female
Test 20 to 1/2 BSPP Female



BHA Hose Fittings

LHIB04F
LHIUN04F
LHE-04
LHE-08

1/4 BSPP Female Hose Fitting
7/16 JIC Female Hose Fitting
1/4 BSPP Female Gauge Fitting
1/2 BSPP Female Gauge Fitting

BHA Test Hose Assembly

Specifications:

- Inside Diameter 2mm (± 0.1)
- Outside Diameter 5mm (± 0.1)
- Minimum Bend Radius 20mm
- Maximum Working Pressure 630 bar
- Minimum Burst Pressure 1900 bar
- Working Temperature -40°C to 100°C

Construction:

- Tube Polyamide
- Braid Kevlar
- Cover Polyamide

We carry a standard range of hose assemblies in Test 12 and Test 20 up to 7 metres in length in 500mm increments.

Other hose assemblies can be made to your specific requirements.



