

Crystal NVision



- NVision 1,000 bar and temperature - ATEX approved
- Field data logging of pressure and temperature
- Temperature monitoring and recording



Specifications	
Manufacturer	Crystal Engineering
Range	0 - 1,034 bar
Temperature	PT-100
Logger	Yes
Accuracy	Pressure 0.1% of reading
Accuracy	Temperature $\pm 0.015\%$ of reading $+0.02$ ohm
Maximum working pressure	1,034 bar
Connection in	1/4" AE MP female

Keller Leo



- Digital manometer with record functions
- Autonomous battery powered instrument with digital display
- Record pressure and temperature over long periods



Specifications	
Pressure range	700 bar, 1,000 bar and 1,400 bar
Temperature range	0 - 50 °C (accuracy 0.5 °C)
Material	Stainless steel (AISI 316L)
Classification	Ex certificate
Software logger included	For analysis of measured data
Connection	Optional
Accuracy	0.1% FS of reading

Data logger

Data logger Intab with PC and software.

- PC-logger 3100i
- High precision data logger with 8,16 or 24 analogue channels
- Advanced technology together with low power makes the logger perfect for all types of measurement
- Several options for even more flexibility are available
- Online
- 8 analogue inputs
- 16 bit resolution

Options

- Offline – stores up to 580.000 samples
- Up to 24 analogue inputs
- 6 pulse counters
- Alarm outputs
- Programmable inputs
 - Thermocouple, voltage, 0 (4) – 20 mA
 - Jack panels, modems etc



Specifications

Weight	15 kg
Height	200 mm
Width	400 mm
Depth	300 mm

Test gauges

- Pressure gauges in different sizes
- For measuring air, oil and aggressive media



Specifications			
Size	4"	6"	10"
Range	0-1.5 bar	0-6 bar	0-10 bar
	0-6 bar	0-40 bar	0-16 bar
	0-10 bar	0-100 bar	0-25 bar
	0-25 bar	0-160 bar	0-40 bar
	0-60 bar	0-400 bar	0-60 bar
	0-100 bar	0-700 bar	0-100 bar
	0-160 bar		0-160 bar
	0-200 bar		0-200 bar
	0-250 bar		0-250 bar
	0-300 bar		0-300 bar
	0-400 bar		0-400 bar
	0-500 bar		0-500 bar
	0-600 bar		0-600 bar
	0-700 bar		0-700 bar
	0-1,000 bar		0-1,000 bar
Accuracy	FSO IEC 60770 standard $\pm 0.6\%$ FS / $\pm 1.0\%$ FS		FSO IEC 60770 standard $\pm 0.25\%$ FS / $\pm 0.3\%$ FS
Dial size	100 mm	160 mm	250 mm

Subsea gauge



- 4 inch subsea gauge
- Especially made for underwater use
- AISI 304/316



Specifications	
Size	4"
Range	0-20 bar
	0-50 bar
	0-100 bar
	0-250 bar
	0-400 bar
	0-600 bar
	0-1,000 bar
Accuracy	± 1.0% FS
Connection	1/4" AE MP or optional
Dial size	100 mm
Weight	1.1 kg

Pressure recorders - De Wit and Barton



- Pressure chart recorders



Specifications	
Range	0-2,000 bar
Accuracy	± 1.0% FSD
Back connection	1/4" NPT female
Weight	8 kg
Height	460 mm
Width	340 mm
Depth	150 mm

Clif mock temperature recorder



- Temperature recorder



Specifications	
Range	-20 - 60 °C
Weight	Approximately 10 kg
Cable length	Various

Pall PCM 400

Automatic particle counter

Includes

- 1 x PCM 400
- 1 x Power supply / charge
- 1 x Data cable
- CD with manual and software
- 1 x sampling stalk



Specifications

Dimension	W390 x L590 x H350
Weight	15 kg
Lifting / transport	Small and handy portable units
Range of application	For online or bottle sampling
Viscosity	1.5 - 450 CST
Measure range	ISO 9/7-21/17, NAS1-10, SAE AS4059D > 6µm: 1B19B > µm 1C - 10C
Temperature range	10-80 °C
Working pressure	0-315 bar
Voltage range	90-130v or 180-240v 47-63 Hz
Type	PCM 400
Equipment / function	Data logging able to store 100 samples in memory
Other information	Compatible with water - glycol, petroleum based liquid, mineral oil and synthetic oil

Yuken microscope



Manual particle counter

- Investigation for hydraulic machine
- Decision of change time to hydraulic oil
- Decision of finish time to flushing



Specifications	
Size	600 x 240 x 360 mm
Weight	9 kg
Range	NAS class 5 to 12
Magnification	40x - 100x
Appropriate fluid	General oil, water, glycol, ester
Power	AC 100v, DC 6v

Pressure transmitter



- Pressure transmitter EEXIA



Specifications	
Manufacturer	Tecsis / BD Sensors / Wika
ATEX	Yes
Range	0-4,000 bar
Output	4-20mA
Accuracy	0.25% - 0.5%

Coning and threading machine (CTM)

- AEGCTM-2E-CE
- Used for medium and high pressure tubing end preparation
- Used for on-site installation, and large size tubing
- A minimum of 127 mm straight length of tubing is required to perform coning and threading operations



Specifications

Dimensions	142 x 71 x 51 cm		
Shipping weight	160 kg		
Cutting oil	Ridgid cutting oil		
Voltage	220 VAC 50 Hz		
Part Number	Description	Die chasers	Cutters only
MS15-092	RØr, 1/4" x 0.109 ID, 20K	AEGCTM4D	CTM4BX
MS15-093	RØr, 3/8" x 0.203 ID, 20K	AEGCTM6D	CTM6BX
MS15-097	RØr, 9/16" x 0.359 ID, 10K	AEGCTM9D	CTM9BXX
MS15-085	RØr, 9/16" x 0.312 ID, 20K	AEGCTM9D	CTM9BX
MS15-098	RØr, 3/4" x 0.516 ID, 10K	AEGCTM12D	CTM12BX
MS15-095	RØr, 3/4" x 0.438 ID, 20K	AEGCTM12D	CTM12B
MS15-099	RØr, 1" x 0.688 ID, 10K	AEGCTM16D	CTM16BX
MS15-096	RØr, 1" x 0.562 ID, 20K	AEGCTM16D	CTM16B
MS15-081	RØr, 1/4" x 0.083 ID, 60K	AEGCTM4D	CTM4B
MS15-087	RØr, 3/8" x 0.125 ID, 60K	AEGCTM6D	CTM6B
MS15-083	RØr, 9/16" x 0.188 ID, 60K	AEGCTM9D	CTM9B
MS15-090	RØr, 9/16" x 0.250 ID, 40K	AEGCTM9D	CTM9B40
MS15-199	RØr, 1" x 0.438 ID, 43K	AEGCTM16D	CTM16BXX

Autoclave manual coning and threading tool

Autoclave manual coning and threading tool for optimum performance with tubing sizes up to 9/16" (14,3mm) outside diameter. These precision quality manual tools permit on-site end preparation for Autoclave medium and high pressure tubing installations.



Specifications

Tube size		Coning tools	
Autoclave medium pressure		Coning blades (set of 2)	Threading die
Outside diameter in. (mm)	Inside diameter in. (mm)		
1/4 (6.35)	109 (2,77) 20k	101F-1577	P-0214
3/8 (9.53)	203 (5,16) 20k	101F-1601	P-0215
9/16 (14.3)	312 (7,91) 20k	1010-5218	P-0216
9/16 (14.3)	359 (9,12) 10k	101A-1897	P-0216
Autoclave high pressure			
Outside diameter in. (mm)	Inside diameter in. (mm)		
1/4 (6.35)	083 (2,11) 40k	101F-3939	P-0214
3/8 (9.53)	125 (3,18) 40k	101F-1578	P-0215
9/16 (14.3)	188 (4,78) 60k	1010-0883	P-0216
9/16 (14.3)	250 (6,35) 40k	101C-7214	P-0216

Autoclave torque wrench

- Accurate tightening for all Autoclave Engineers
- Valve packing glands and tube nuts is essential
- The wrench can be adjusted from 20 to 150 ft.-lbs. (27 to 203 Nm)
- Used with inter-changeable wrench adapters for hex sizes from 1/2" through 1-1/2"



Specifications - Autoclave engineer tube connection glands

Tube nut hex size	Medium pressure	Required torque
1/2"	1/4"	20 (27,1)
5/8"	3/8"	30 (40,6)
15/16"	9/16"	55 (74,5)
1-3/16"	3/4"	90 (122,0)
1-3/8"	1"	150 (203,3)
Tube nut hex size	High pressure	Required torque
5/8"	1/4"	25 (33,9)
13/16"	3/8"	50 (67,8)
1-3/16"	9/16"	110 (149,1)
3/4"	5/16"	70 (94,9)
1-3/8"	1"	150 (203,3)

Bending tool 1/4"



- Hand tube bender



Specifications	
Bending radius	9/16"
Bending range	1 to 180 °

Bending tool 3/8"



- Hand tube bender



Specifications	
Bending radius	15/16"
Bending range	1 to 180 °

Ercolina bending machine



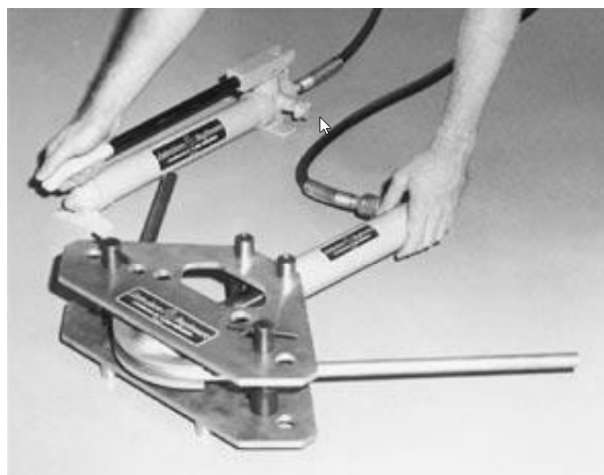
Specifications	
Tubing AE MP/HP	Minimum bend inside radius
3/8"	44.5 mm
9/16"	66.5 mm
3/4"	88.9 mm
1"	117.3 mm

Hydraulic tube bender

Parker Autoclave Engineers hydraulic tube bender is designed to bend heavy wall tubing and provide fast, accurate and reliable bending

Features:

- Single stage hydraulic hand pump
- Quick release pivot pins, lock and unlock easily for tube removal
- One-piece shoe locking pin locks bending shore securely but allows for quick release to interchange shoes
- Rugged bending frame is lightweight, aircraft quality, aluminium alloy
- Precision one-piece bending shoes
- Delivered in a pelicase
- Weight tool: 30 kg



Specifications

Shoe catalogue number	Tube size inches (mm)		†† Rated pressure (bar)	†† Minimum bend inside radius inches (mm)	Minimum length required 90° bend inches (cm)
	outside diameter	inside diameter			
201A-6016	9/16 (14.29)	0.359 (9.12)	15,000 (1,034)	2.62 (66.5)	14 (35.6)
201A-6018	3/4 (19.05)	0.516 (13.11)	15,000 (1,034)	3.50 (88.9)	16 (40.6)
201A-6020	1 (25.4)	0.688 (17.48)	15,000 (1,034)	4.62 (117.3)	22 (55.8)
201A-6014 †	1/4 (6.35)	0.109 (2.77)	20,000 (1,379)	1.25 † (31.8)	8 (20.3)
201A-6014	3/8 (9.53)	0.203 (5.16)	20,000 (1,379)	1.75 (44.5)	8 (20.3)
201A-6016	9/16 (14.29)	0.312 (7.92)	20,000 (1,379)	2.62 (66.5)	14 (35.6)
201A-6018	3/4 (19.05)	0.438 (11.13)	20,000 (1,379)	3.50 (88.9)	16 (40.6)
201A-6020	1 (25.4)	0.562 (14.27)	20,000 (1,379)	4.62 (117.3)	22 (55.8)
201A-6020	1 (25.4)	0.438 (11.13)	43,000 (2,965)	4.62 (117.3)	22 (55.8)
201A-6014 †	1/4 (6.35)	0.083 (2.10)	60,000 (4,137)	1.25 (31.8)	8 (20.03)
201A-6014	3/8 (9.53)	0.125 (3.18)	60,000 (4,137)	1.75 (44.5)	8 (20.3)
201A-6016	9/16 (14.29)	0.250 (6.35)	40,000 (2,758)	2.62 (66.5)	14 (35.6)
201A-6016	9/16 (14.29)	0.188 (4.78)	60,000 (4,137)	2.62 (66.5)	14 (35.6)

Density meter 30PX

- Density measurement using the oscillating tube method
- The portable lab contains all the accessories you need for measurements and calibrations e.g. pipettes, containers, cleaning materials and calibration solutions



Specifications	
Range	0.0000 to 2.0000 g/cm ³
Resolution	0.0001 g/cm ³
Accuracy	± 0.001 g/cm ³
Weight density meter	Approximately 360g
Batteries density meter	2XLR3 1.5v batteries Type AAA, approximately 90 hours battery life

LP filter unit



The polypropylene housing is not recommended for compressed air or gas service. It is suitable only for liquids which are compatible with polypropylene under long-term conditions.



Specifications

Max pressure	10 bar
Max flow	100 l/min
Size	20" filter housing
Inlet	1" NPT f
Outlet	1" NPT f

Small quick bend



- Bender for thick-walled tubes and pipes 3/8" – 3/4" / 6 – 32 mm
- The small quick bend is a practical and precise tool for bending thick-walled tubes and pipes
- Rugged mechanical structure guarantees operation in all conditions
- Can be used for tubes and pipes with a wall thickness of 10% of outer diameter



Specifications	
Imperial size tubes and pipes	Threadable steel pipes, gas pipes, steam and water pipes
Millimetre size tubes and pipes	Hydraulics pipes, precision steel tubes

Safety and pressure regulating valve

- VS500 – compensated pressure regulating valve
- Suitable to be used as a safety valve
- Central body and fittings in brass
- Internal components in SsT
- Moving parts totally protected



Specifications

Weight	1,420 g
Rated pressure	500 bar
Minimum adjustable pressure	50 bar
Max flow rate	80 l/min
Max temperature	90 °C*

*The valve has been designed for a continuous use at a water temperature of 60°C. It can resist for short periods at a maximum temperature of 90°C

Water sensor WS09



Portable measuring device for moisture content in oil

Features

- Plug and play
- Temperature in °C or °F
- Simple to operate and calibrate
- Water content output in % or PPM



Specifications	
Dimension	85 x 145 x 37 mm
Fluid compatibility	Petroleum based and synthetic fluid. The water sensor is not to be used in water based fluids.
Probe cable length	2 metres
Accuracy saturation	± 2% 0 to 90% RH and ± 3% 90 to 100%
Accuracy temperature.	± 0.2°C (± 0.36°F) at 20°C (68°F) ± 0.7°C (± 0.9°F) at -40°C (-40°F) ± 0.7°C (± 0.9°F) at 100°C (248°F)
Weight	0.43 kg
CE compatibility	EN61000-6-4 EN61000-6-2 EN55011 EN61000-4-2 EN61000-4-3