

PRODUCT OVERVIEW

HYDRAULIC CONTROL VALVES AND TEST EQUIPMENT





ABOUT US

Improving the performance of hydraulic machinery worldwide

We are specialist manufacturers of hydraulic measurement and control products helping to improve the productivity of heavy machinery.

For 60 years we have been helping customers worldwide in the industrial, mobile, and agricultural sectors to diagnose hydraulic faults, verify hydraulic conditions and achieve repeatable hydraulic control.

Using our Make it BLUE® manufacturing process we help customers maximise the potential of their hydraulic machinery but without the complexity of costly consultancy.





HOW TO USE THIS GUIDE





HYDRAULIC MEASUREMENT AND CONTROL

Typical Applications

ground support		Materials handling
	<u></u>	Military
	76	Mining and Quarrying
ining	<u></u>	Municipal vehicles
on		Oil and Gas
	k	Power plants
epair and rebuild	≝	Steel and paper mills
		Truck and Bus



VFD120 SERIES

Variable Priority Flow Dividers

- Total Flow: Up to 120 L/min, 32 US gpm
- Porting: BSPP, SAE, NPT, METRIC
- Aluminium knob
- Weight: Typically 2.0 kg, 4.4 lbs

VFD190 SERIES

Variable Priority **Flow Dividers**

- Total Flow: Up to 190 L/min, 50 US gpm
- Portina: BSPP. SAE
- Aluminium knob
- Weight: 3.5 to 4.0 kg, 7.7 to 8.8 lbs

VFD120MD SERIES

Remote Proportional Control

- Total Flow: Up to 120 L/min, 32 US gpm
- Porting: BSPP, SAE, NPTF, METRIC
- bracket
- Weight: 2.75 kg, 4.4 lb

Variable Priority Flow Dividers with Electric Motor Drive

- Total Flow: Up to 120 L/min, 32 US gpm
- Porting: BSPP, SAE, NPTF, METRIC
- Weight: 2.75 kg, 4.4 lb

WEBTEC

HYDRAULIC MEASUREMENT AND CONTROL

HYDRAULIC CONTROL VALVES

FLOW CONTROL TWO-PORT

ILFC SERIES

Fixed Flow Pressure Compensated Control Valve

- Maximum Rated Pressure: 210 bar, 3000 psi
- Maximum Rated Flow: 16 L/min, 4 US gpm
- Porting: SAE, BSPP & NPTF

Variable Flow Pressure

• Porting: SAE, BSPP & NPTF

Compensated Control Valve

• Maximum Pressure: 210 bar, 3000 psi

• Maximum Flow: 55 L/min, 15 US gpm

• Materials: Body Materials: Aluminium

Seals: NBR, PTFE

Internal Materials: Carbon Steel

- Materials: Body Materials: Zinc Plated Steel Body Internal Materials: Steel and Aluminium Seals: NBR
- Mounting: In-line

VFC SERIES



AT A GLANCE



AT A GLANCE













AT A GLANCE

FLOW CONTROL THREE-PORT



Variable Priority Flow Dividers

VFD50 SERIES

- Maximum Pressure: Up to 250 bar, 3,625 psi
- Total Flow: Up to 50 L/min, 13.2 US gpm
- Maximum Priority (REG) Flow: Up to 30 L/min, 7.9 US gpm
- Porting: BSPP, NPT, Manifold Mount
- Material: Steel components in cast SG Iron body. Aluminium knob
- Weight: Typically 0.75 kg, 1.65 lbs





VFD120-E SERIES





HYDRAULIC CONTROL VALVES



HYDRAULIC CONTROL VALVES



FDC60 SERIES

Flow Divider Combiner

FDC140 SERIES

Divider Combiner

High Flow

- Maximum Rated Pressure: Up to 310 bar, 4,500 psi
- Maximum Rated Flow: Up to 70 L/min, 18 US gpm
- Ambient Temperature Range: -30 to 100°C, -22 to 212°F
- Fluid Temperature Range: -30 to 100°C, -22 to 212°F
- Compatible Fluids: Mineral oils to ISO 11158. Other fluids consult sales office
- Accuracy: +/- 2.0% of valve rated maximum flow

• Maximum Rated Pressure: 420 bar, 6000 psi

• Maximum Total Flow: Up to 140 L/min, 37 US gpm

• Ambient Temperature Range: -30 to 100 °C, -22 to 212 °F

• Hydraulic Fluid: Mineral & Synthetic oils. For other fluid types

• Accuracy/ Tolerances: +/- 1.5% of valve rated maximum flow

• Fluid Temperature Range: -30 to 100 °C, -22 to 212 °F



AT A GLANCE

AT A GLANCE



MONOBLOCK



CV120 SERIES

- - Porting: BSPP, SAE
 - Aluminium knob
 - Weight: 8.9 kg, 19.5 lb













contact sales

Variable Priority Flow Dividers with Built in Relief or Check Valve

- Maximum Rated Pressure: Up to 250 bar, 3630 psi
- Maximum Rated Flow: Up to 114 L/min, 30 US gpm
- Compatible Fluids: Other fluids consult sales office
- Porting: BSPP, NPTF, SAE, METRIC
- Material: Body Materials: Cast Iron, Aluminium knob Internal Materials: Steel components
- Weight: 3.5 kg, 7.7 lbs

FV120 / 200

Fixed and proportional flow divider valves

- Maximum Rated Pressure: Up to 420 bar, 6000 psi
- Maximum Flow Capacity: 76 L/min, 20 US gpm
- Porting: BSPP, SAE
- Material: Steel components in cast iron body
- Weight: 1.6 kg, 3.5 lb
- Mounting: 2 Bolts, M8 or 5/16"



DIRECTIONAL ZERO-LEAK







180 SERIES

- Seal: NBR

280 SERIES

Stainless Steel Rotary Direction Control Valve for Hydraulics in a Harsh Environment • Maximum Rated Pressure: Up to 700 bar, 10,000 psi

- Maximum Rated Flow: Up to 38 L/min, 10 US gpm
- Ambient Temperature: -20 to 50°C, -4 to 122°F
- Media Temperature: -30 to 120°C, -22 to 248°F
- Porting: BSPP, NPTF, SAE, Manifold Mount
- Material: Body Materials: Stainless Steel, Phenolic resin knob. Internal Materials: Carbon Steel Seal: NBR

SV80 SERIES

Valve

- consult sales office
- Material: Internal Material: Stainless Steel
- Porting: BSPP, SAE
- Weight: 2 kg, 4.4 lb

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HYDRAULIC CONTROL VALVES

Combination Valve - Variable Priority flow divider with Directional Control

• Maximum Rated Pressure: Up to 250 bar, 3600 psi • Total Flow Capacity: 120 L/min, 32 US gpm · Regulated Flow Capacity: Up to 95 L/min, 25 US gpm

• Material: Steel components in cast Ductile Iron body painted black



AT A GLANCE



- Maximum Rated Pressure: Up to 700 bar, 10,000 psi
- Maximum Rated Flow: Up to 38 L/min, 10 US gpm
- Ambient Temperature: -20 to 50°C, -4 to 122°F
- Media Temperature: -30 to 120°C. -22 to 248°F
- Porting: BSPP, SAE, NPTF, Manifold Mount
- Material: Body Materials: Aluminium, Phenolic resin knob. Internal Materials: Carbon Steel



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AT A GLANCE





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• Maximum Rated Pressure: Up to 210 bar, 3000 psi • Maximum Rated Flow: Up to 80 L/min, 21 US gpm • Compatible Fluids: Mineral oils to ISO 11158. Other fluids

Body Material: Cast Iron

HYDRAULIC CONTROL VALVES



• Mounting: One 8.7mm x 40mm, 0.343" x 1.575" Mounting Hole

HYDRAULIC MEASUREMENT AND CONTROL

FLOW AND TEMPERATURE

FI750 SERIES



In-Line **Flow Indicator**

- Porting: BSPP, NPSF, SAE
- Material: Body Material: Aluminium 2011T6 Seal: FKM
- Weight: 1.4 kg, 3.1 lbs

FI1500 SERIES

In-Line Flow Indicator

- Porting: BSPP, SAE
- Material: Body Materials: Aluminium 2011T6 Seals: FKM
- Weight: 3.2 kg, 7 lb
- **FLOWHUB SERIES**

Flow, Temperature, Measure, Display, Switch, Transmit

- Porting: Male BSPP, Male SAE JIC
- Material: Body Materials: Aluminium





















INDUSTRIAL CONDITION MONITORING

• Maximum Rated Pressure: Up to 420 bar, 6,000 psi • Maximum Rated Flow: Up to 180 L/min, 48 US gpm • Ambient Temperature: -10 to 50°C, 14 to 122°F

Internal Material: Mainly Brass

• Maximum Rated Pressure: Up to 350 bar, 5000 psi • Maximum Rated Flow: Up to 400 L/min, 100 US gpm • Ambient Temperature: -10 to 50°C, 14 to 122°F

Internal Materials: Mainly Brass





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• Maximum Rated Pressure: 420 bar, 6000 psi • Maximum Rated Flow: 360 L/min, 95 US gpm • Ambient Temperature Range: 0 to 50°C, 32 to 122°F • Fluid Temperature Range: 5 to 90°C, 41 to 194°F Internal Materials: Brass, Stainless Steel, Carbon Steel

INDUSTRIAL CONDITION MONITORING





PORTABLE HYDRAULIC TESTERS

	AT A GLANCE
er ssure: Up to 420 bar, 6090 psi o 270 L/min, 70 US gpm e Range: -10 to 50°C, 14 to 122°F ange: 20 to 80°C, 68 to 176°F lineral oils, Other fluids consult sales 6 FS \pm 1.6% FS ure: \pm 2.5 °C, \pm 5 °F	
NEW	AT A GLANCE
Fr ssure: Up to 480 bar, 7000 psi w: Up to 800 L/min, 210 US gpm ange: -10 to 120°C, 14 to 250°F e: -10 to 50°C, 14 to 122°F neral oils to ISO 11158. Other fluids % full scale ± 1.6 % full scale ure: ± 1 °C, ± 2 °F	
	AT A GLANCE
iC ssure: Up to 480 bar, 7000 psi w: Up to 800 L/min, 210 US gpm e: 5 to 40°C, 41 to 104°F neral oils to ISO 11158. Other fluids	2

• Material: Case: Powder coat painted Mild Steel Flow Block: High tensile aluminium

HPM7000 SERIES

Hydraulic Data Logger

- Memory: 12GB

- 5800 psi or less

CT FOR HPM SERIES

Turbine Flow Meters

- sales office.
- Portina: BSPP. SAE

CTR FOR HPM SERIES

Turbine Flow Meters with Built-In Loading Valve

- Maximum Flow: 750 L/min, 200 US gpm

- sales office.
- Porting: BSPP, SAE

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HYDRAULIC MEASUREMENT AND CONTROL

HYDRAULIC DATALOGGERS

• Maximum Rated Pressure: Up to 600 bar, 8700 psi

• Fluid Temperature Range: -20 to 80 °C, 4 to 176 °F

• Ambient Temperature Range: -10 to 50 °C, 14 to 144 °F

· Compatible Fluids: oil, water, other fluids consult sales office

DATALOGGERS

HPM110 SERIES

Gauge

Digital Pressure







HPM4000 SERIES **Hydraulic Data**

• Accuracy/ Tolerances: ±0.5% Full Scale

Logger

• Porting: BSPP, SAE

- Operating Temperature Range: 0 to 50°C, 32 to 122°F
- Power Supply: Input 100 240 VAC
- Connection Type: Micro-USB socket, Type B, +5 VDC man 1000mA
- Battery: Lithium Ion pack 3.7 VDC, 4500 mAh
- Battery life: With 2 sensors >8 hours
- Degree of Protection: IP67 (EN60529)

HPM5000 SERIES



- Ambient Temperature Range: -20 to 50°C, -4 to 122°F
- Ports: USB-C (fast charging and data transmission between device and PC), USB-A host (data storage via USB memory stick)
- Battery: Lithium-Ion pack, 7.2 V / 3500 mAh / 25.44 Wh
- Degree of Protection: IP65 (EN 60529:1989 + A1:1999 + A2:2013)
- Material: Body Material: ABS/PC (thermoplastic), Body Protective Material: ABS/PC (thermoplastic elastomer)
- Mounting: Folding Stand and VESA standard 75 x 75 mm / M4 metric

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AT A GLANCE







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SENSORS FOR DATALOGGERS







NFV

















HYDRAULIC DATALOGGERS



WEBTEC

HYDRAULIC MEASUREMENT AND CONTROL

Hydraulic Data Acquisition

System

• Modular 8-64 inputs

TEST STAND INSTRUMENTATION

HYDRAULIC DATA ACQUISITION





FLOW





• Runs using Windows(TM) compatible software · Hydraulic test solution Print test Certificates TCP/IP network ready · Dedicated high-speed controller GF SERIES **Positive Discplacement Flow** Meters with Conditioned Output • Maximum Rated Pressure: 420 bar, 6,000 psi • Maximum Rated Flow: 150 L/min, 40 US gpm • Fluid Temperature Range: -40 to 120°C, -40 to 284°F • Compatible Fluids: Mineral oils to ISO 11158. Other fluids consult sales office. • Porting: BSPP, SAE • Material: Body Materials: Stainless Steel Internal Materials: Stainless Steel Seals: NBR (Other seals consult sales office) CT SERIES **Turbine Flow Meters with Conditioned Output** • Maximum Rated Pressure: 480 bar, 6,960 psi

- Maximum Flow: 1,500 L/min, 396 US gpm
- Ambient Temperature Range: 5 to 40°C, 41 to 104°F
- Fluid Temperature Range: 5 to 90°C, 41 to 194°F
- Compatible Fluids: Mineral oils to ISO 11158. Other fluids consult sales office.
- Porting: BSPP, SAE





- Maximum Rated Pressure: 480 bar, 7,000 psi • Maximum Rated Flow: 800 L/min, 210 US gpm • Ambient Temperature Range: 5 to 40°C, 41 to 104°F • Fluid Temperature Range: 5 to 90°C, 41 to 194°F

- Compatible Fluids: Mineral oils to ISO 11158. Other fluids consult sales office.
- Porting: BSPP, SAE

PRESSURE, TEMPERATURE & SPEED



Digital process meters for

- Combined digital and bar graph display
- USB port for custom user settings
- · Warning flash backlight
- Less than 53mm deep
- Display Range (Both Min & Max values)
- Two independent outputs or 4-20mA analogue monitor outputs

WIKA-A-10 TYPE

Pressure Transducers

- Accuracy: ≤ ±1% Full Scale
- Materials: FKM
- Weight: 0.080 kg, 0.18 lbs
- Mounting: BSPP, SAE

SP-TTL SERIES

Magnetic Speed Pickup with Conditioned Output

- Weight: 0.25kg, 0.55 lb
- Supply voltage (VS): 12 32 VDC
- Connection type: M12x1 5 pin
- Main Body: Steel 212A42 electroless nickel plated Lid: Aluminium 2011 T3 electroless nickel plated Treaded section: Steel 212A42 electroless nickel plate













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TEST STAND INSTRUMENTATION

Turbine Flow Meters with Conditioned Output and Built-in Loading Valve

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APM ADVANCED PANEL METERS

analogue sensors





- Pulse output: 0 5 V square wave, minimum load 600 ohms

TEST STAND INSTRUMENTATION



FLOW AND TEMPERATURE

CTA SERIES



Heavy Duty Hydraulic System Flow Monitor

Rugged, resilient hydraulic oil flow and temperature monitors designed for permanent installation in mobile or industrial machinery.

Ideal for industrial on and off-highway machinery to monitor hydraulic system performance. Suitable for closed loop control, real-time diagnostics, safety interlocks and inclusion in predictive maintenance / IoT systems to reduce down-time or enable autonomous vehicle operation.

Designed to meet the standards for components fitted to heavy duty machinery applications, the meters have a J1939 CAN-bus interface or 4-20 mA output for easy integration.

- Maximum Flow: 300 L/min, 80 US gpm
- consult sales office.
- Porting: BSPP, SAE
- Output: 4-20 mA (3-wire): M12 connector

J1939 SERIES

- Maximum Rated Pressure: 480 bar, 7000 psi
- Maximum Flow: 1500 L/min, 400 US gpm
- Ambient Temperature Range: 5 to 40°C, 41 to 104°F
- Compatible Fluid: Mineral oils to ISO 11158. Other fluids consult sales office.







MOBILE CONDITION MONITORING

NFW



• Maximum Rated Pressure: 420 bar, 6,000 psi

• Fluid Temperature Range: -40 to 90 °C, -40 to 194 °F

• Compatible Fluids: Mineral oils to ISO 11158. Other fluids

SAE J1939 Compatible: Deutsch connector



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• Fluid Temperature Range: 5 to 90°C, 41 to 194°F continuous use

• Accuracy/Tolerances: Reading 15% to 100% of flow range - 1% of indicated reading. Readings below 15% of full scale flow fixed accuracy of 0.15% of full scale (CT15 is 1% of full scale).



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BURST DISCS

Safety Burst

- Guaranteed to rupture within the specified pressure range. • Protects the load valve from accidental overpressurisation. • Easy installation allowing side or top connections • Fast and easy to replace.



HYDRAULIC MEASUREMENT AND CONTROL

HYDRAULIC ACCESSORIES

ACCESSORIES









PT SERIES		AT A G	LANCE	
Custom Pressure Test Kits	X	?		_
Custom built to your specification - pick and mix from huge range				1
 The kit includes gauges, hoses, test points and adaptors 				
 Provides a complete test system for rapid pressure testing 				

- Pressure test points can be fitted anywhere in the circuit for instant pressure checks saving installation costs of piping and gauges
- Test hoses can be connected by hand under full system pressure without loss of oil or ingress of dirt. Ideal for taking oil samples and bleeding air
- The case provides ample storage. The gauge panel can be removed for convenient use while testing.

63 MM DIAMETER

Pressure Gauges

- Bottom or centre back connection
- Glycerine filled

HV SERIES

Loading

Valves

• 1/4" BSPP connection

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- Maximum Rated Pressure: 420 bar, 6,000 psi)
- Maximum Rated Flow: Up to 800 L/min, 210 US gpm
- Ambient Temperature: 5 to 40°C, 59 to 104°F
- Fluid Temperature Range: 0 to 120°C, 32 to 248°F
- Compatible Fluids: Mineral oils to ISO 11158. Other fluids consult sales office
- Porting: BSPP, SAE





- Discs

HYDRAULIC ACCESSORIES





APPLICATIONS AND INDUSTRY SECTORS

Aerospace ground support	Materials handling
Agricultural	Military
Automotive	Mining and Quarrying
CNC machining	Municipal vehicles
Construction	Oil and Gas
Forestry	Power plants
Hydraulic repair and rebuild	Steel and paper mills
Marine	Truck and Bus





HYDRAULIC MEASUREMENT AND CONTROL





Webtec reserve the right to make improvements and changes to the specification without notice

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