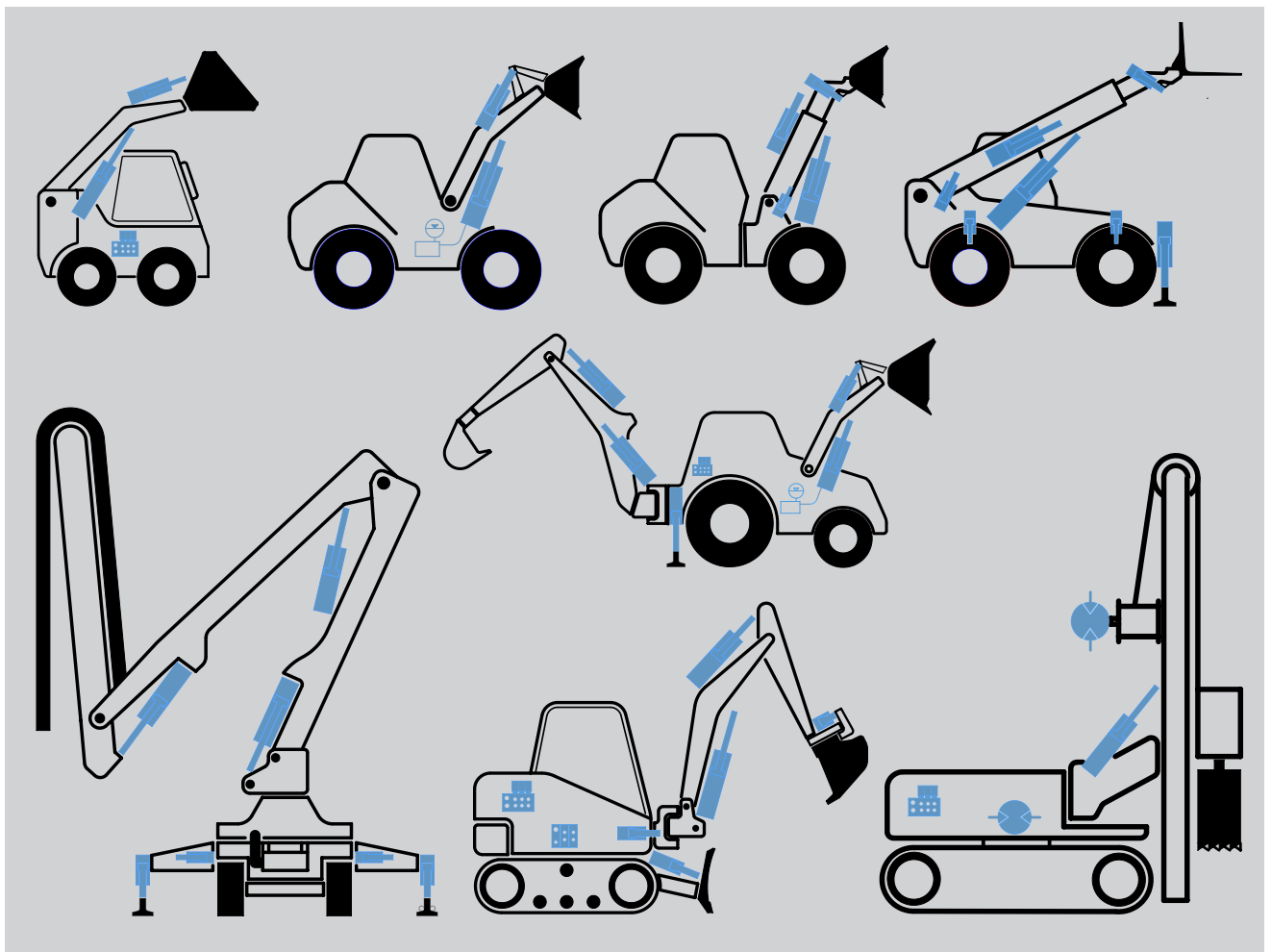
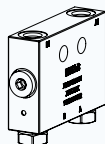
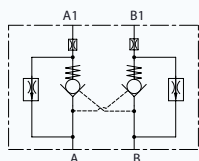


Solutions from NEM for Construction Machinery



1 - 8 Ton excavators

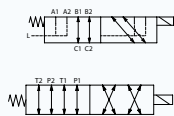


Hydraulic integrated circuits

XA12 series: 5 L/min / 50 bar

Installation: In-line

Quick start / Smooth stop; Main control valve (MCV) pilot pressure dynamic management

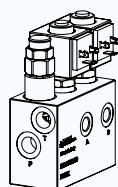
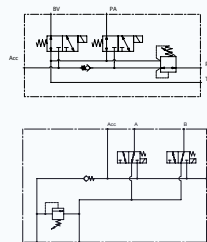


Selector valves

XA series: 10 L/min / 50 bar

Installation: In line

Switching of 2 or 4 pilot lines (6 or 8 ways), with Internal / External drain

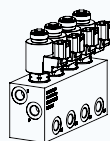
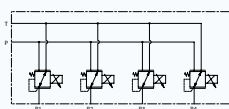


Joystick feeding units

XA12 series: 20 L/min / 350 bar

Installation: In-line

Pressure reducing /relieving for feeding pilot pressure lines



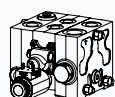
Hydraulic integrated circuits

XA12 series: 5 L/min / 210 bar

Controlled pressure 30 bar

Installation: In-line / Customizable

Piloting main control valves auxiliary sections



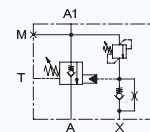
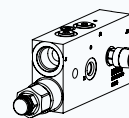
Directional control valves

NVD2 series: 50 L/min / 350 bar / for fix and LS pump

Electro proportional control; multifunctional operation;

Flow Sensing concept

Controlled functions: auxiliary attachments

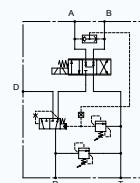
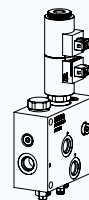


Load lowering control valves (ISO 8643)

Y50 / Y10 / Y15 series: 40 - 180 L/min / 420 bar

Installation: In line / Flanged

Boom and positioning cylinders

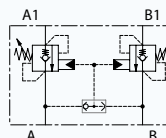
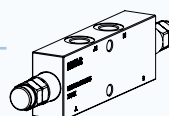


Hydraulic integrated circuits

XA12 series: 40 L/min / 250 bar

Installation: In-line / Customizable

Quick attach couples for open or closed center systems

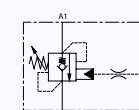
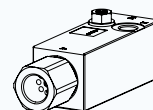


Counterbalance valves

H30; H50 series: 40 / 70 L/min / 350 bar

Installation: In-line

Swing cylinders

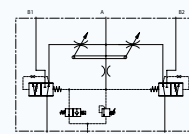
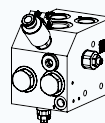


Counterbalance valves

H30; H50 series: 40 / 70 L/min / 350 bar / p.r. 9.5:1

Installation: In-line

Blade cylinders



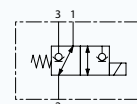
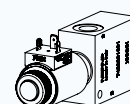
Priority flow regulator with electric activation

6F3 series: 100 - 400 L/min / 350 bar

Reg. flow max. 85 - 300 L/min

Single and double inlet pumps (P ports)

Auxiliary tools: breakers, cutter heads, crusher buckets



Hydraulic integrated circuits

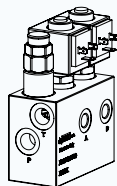
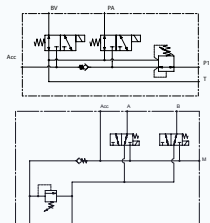
XA12 / 7423... series: 30 L/min / 350 bar

Installation: In line / Customizable

Extendable undercarriage control

Solutions for Construction Machinery

9 - 20 Ton excavators

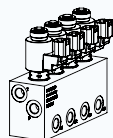
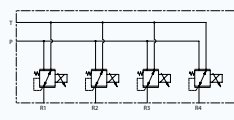


Joystick feeding units

XA12 series: 20 L/min / 350 bar

Installation: In-line

Pressure reducing /relieving for feeding pilot pressure lines



Hydraulic integrated circuits

XA12 series: 5 L/min / 210 bar

Controlled pressure 30 bar

Installation: In-line / Customizable

Piloting main control valves auxiliary sections

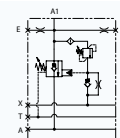
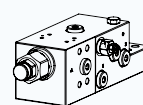
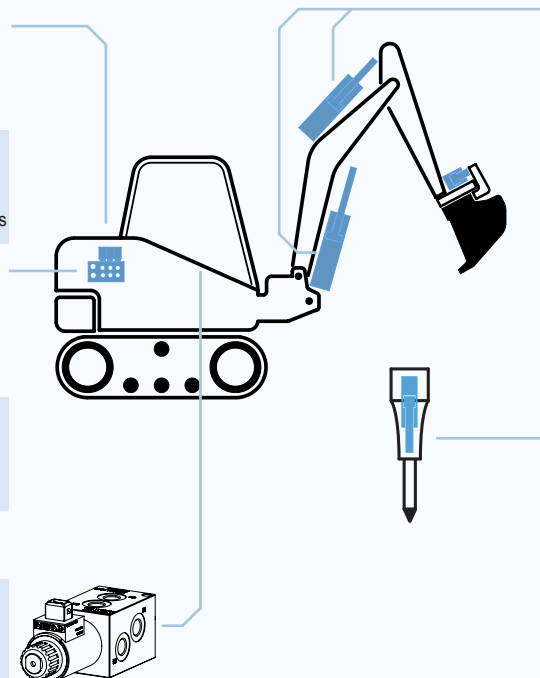


Selector valves

XA series: 10 L/min / 50 bar

Installation: In line

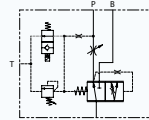
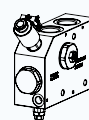
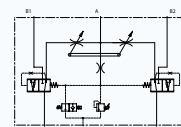
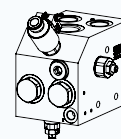
Switching of 2 or 4 pilot lines (6 or 8 ways), with Internal / External drain



Load lowering control valves (ISO 8643)

Y10 / Y15 / Y25 series: 75 - 400 L/min / 420 bar

Installation: Flanged from 1/2" to 1-1/4" SAE 6000 psi
Boom and positioning cylinders



Priority flow regulator with electric activation

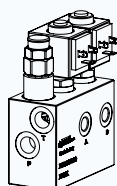
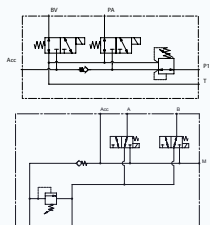
6F3 series: 100 - 400 L/min / 350 bar

Reg. flow max. 85 - 300 L/min

Single and double inlet pumps (P ports)

Auxiliary tools: breakers, cutter heads, crusher buckets

Wheel excavators

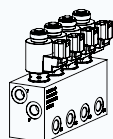
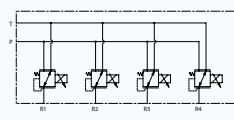


Joystick feeding units

XA12 series: 20 L/min / 350 bar

Installation: In-line

Pressure reducing /relieving for feeding pilot pressure lines



Hydraulic integrated circuits

XA12 series: 5 L/min / 210 bar

Controlled pressure 30 bar

Installation: In-line / Customizable

Piloting main control valves auxiliary sections

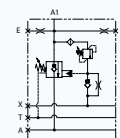
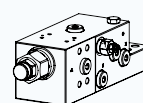
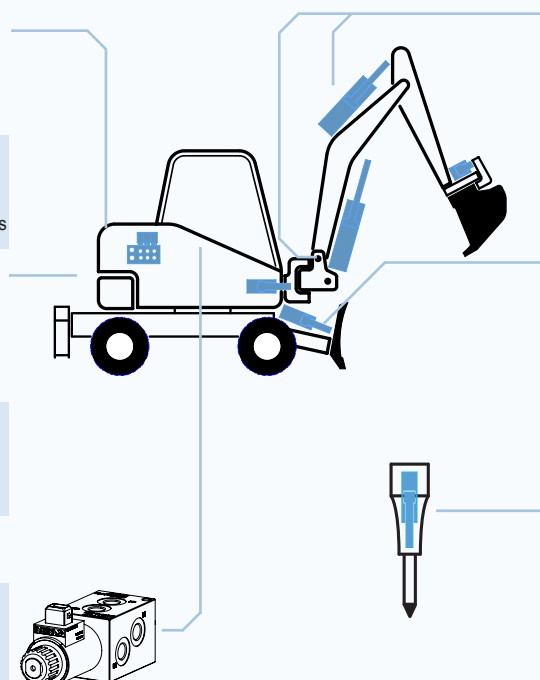


Selector valves

XA series: 10 L/min / 50 bar

Installation: In line

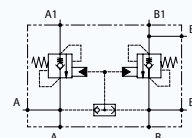
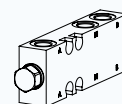
Switching of 2 or 4 pilot lines (6 or 8 ways), with Internal / External drain



Load lowering control valves (ISO 8643)

Y10 / Y15 / Y25 series: 75 - 400 L/min / 420 bar

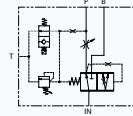
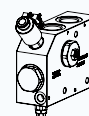
Installation: Flanged from 1/2" to 1-1/4" SAE 6000 psi
Boom and positioning cylinders



Counterbalance valves

H54 / H10 series: 70 - 110 L/min / 410 bar / p.r. 9:1

Installation: Flanged
Blade



Priority flow regulator with electric activation

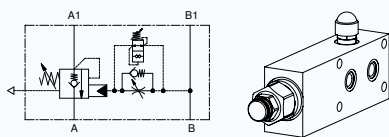
6F3 series: 100 - 400 L/min / 350 bar

Reg. flow max. 85 - 300 L/min

Single and double inlet pumps (P ports)

Auxiliary tools: breakers, cutter heads, crusher buckets

Telescopic handlers

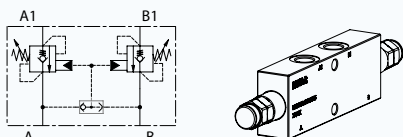


Counterbalance valves

H15 series: 180 L/min / 410 bar

Installation: Flanged / In-line

Back pressure compensated; damped piloting;
quick response time (VIP02 patented)

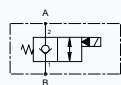


Counterbalance valves

H50 series: 70 L/min / 350 bar / p.r. 9,5:1

Installation: In-line

Self-levelling cylinders / Lifting force control

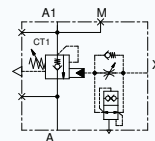
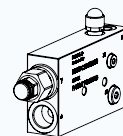


Hydraulic integrated circuits

XA series: 60 L/min / 350 bar

Installation: Flanged / Customizable

Rear axles lock

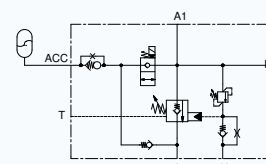
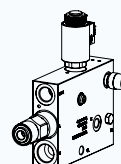


Counterbalance valves

H10 / H15 series: 110-180 L/min / 410 bar

Installation: Flanged / In-line

Back pressure compensated; damped piloting;
quick response time (VIP02 patented)

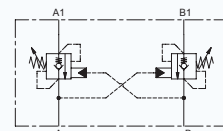
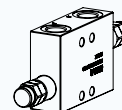


Load lowering control valves

Y15 series: 180 L/min / 420 bar

Installation: Flanged / In-line

With and without embedded suspension systems



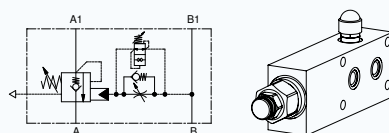
Counterbalance valves

H50 series: 70 L/min / 350 bar / p.r. 4:1

Installation: Flanged 40x48, 20x55

Outriggers and frame levelling cylinders;
low pressure drop characteristics

Telescopic wheel loaders

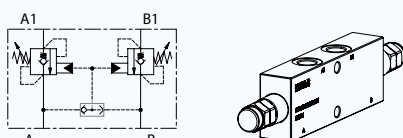


Counterbalance valves

H15 series: 180 L/min / 410 bar

Installation: Flanged / In-line

Back pressure compensated; damped piloting;
quick response time (VIP02 patented)

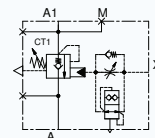
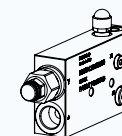
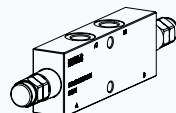


Counterbalance valves

H50 series: 70 L/min / 350 bar / p.r. 9,5:1

Installation: In-line

Self-levelling cylinders / Lifting force control

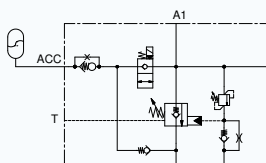
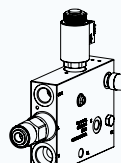


Counterbalance valves

H10 / H15 series: 110-180 L/min / 410 bar

Installation: Flanged / In-line

Back pressure compensated; damped piloting;
quick response time (VIP02 patented)



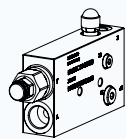
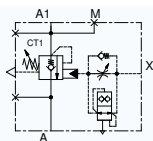
Load Lowering control valves

Y15 series: 180 L/min / 420 bar

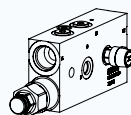
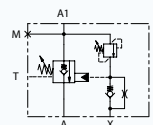
Installation: Flanged / In-line

With and without embedded suspension systems

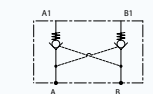
Backhoe loaders



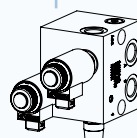
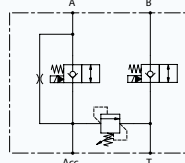
Counterbalance valves (for manual operated DCVs)
H15 series: 180 L/min / 410 bar / p.r. 8:1 - 13:1
Installation: In-line
Boom and arm cylinders; back pressure compensated; damped piloting; quick response time (VIP02 patented)



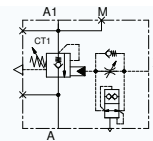
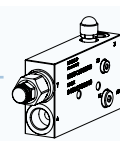
Load lowering control valves (ISO 8643)
Y15 series: 180 L/min / 420 bar
Installation: In-line
Boom and arm cylinders; joystick operated; fine metering plungers



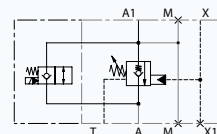
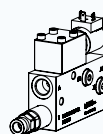
Pilot operated check valves
6D series: 60 L/min / 350 bar
Installation: Flanged / In-line
Outrigger and crossbar cylinders; single and double acting; hardened seats on request



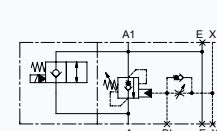
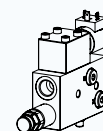
Hydraulic integrated circuits
XA series: 60 L/min / 350 bar
Installation: Customizable
Boom suspension systems



Counterbalance valves
H10 / H15 series: 110-180 L/min / 410 bar
Installation: Flanged / In-line
Back pressure compensated; damped piloting; quick response time (VIP02 patented)

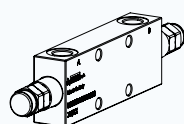
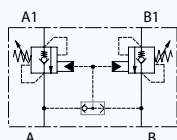


Load lowering control valves (ISO 8643)
Y10 series: 75 L/min / 350 bar
Installation: In-line
Joystick operated; fine metering plungers; with and without electric by-pass

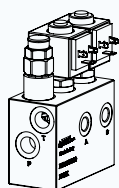
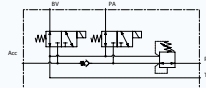


Counterbalance valves
H50 / H10 series: 70-110 L/min / 350 bar
Installation: Flanged / In-line
With electric by-pass; damped piloting; quick response time (VIP02 patented)

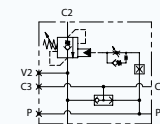
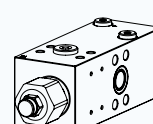
Drilling



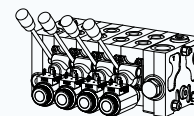
Counterbalance valves
H50 series: 70 L/min / 350 bar / p.r. 4:1
Installation: Flanged 40x48
Positioning cylinders



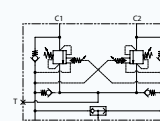
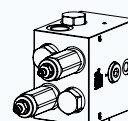
Joystick feeding units
XA12 series: 20 L/min / 350 bar
Installation: In-line
Pressure reducing / relieving for feeding pilot pressure lines



Counterbalance valves
H25 series: 350 L/min / 420 bar / p.r. 13:1
Installation: Flanged 3/4" - 1" SAE6000
Winch motors; with brake releasing port (C3)



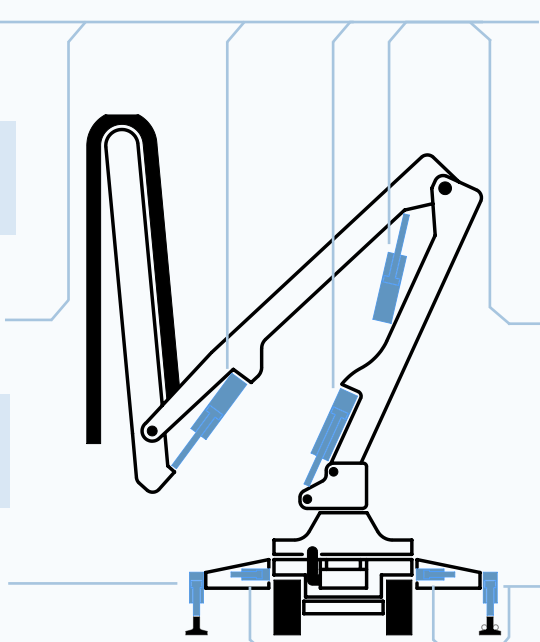
Directional control valves
NVD2 series: 50 L/min / 350 bar / for fix and LS pump
Electro proportional control; multifunctional operation; Flow Sensing concept
Controlled functions: main and auxiliary function



Motion control valves
XA03 series: 120 L/min / 210 bar
Installation: In-line
Slewing motor

Solutions for Construction Machinery

Concrete pumps



Counterbalance valves
H50 series: 70 L/min / 350 bar / p.r. 1,6:1-2,6:1 (PBO)
Installation: Flanged 40 x 48
Boom cylinders

Counterbalance valves
H53 series: 70 L/min / 420 bar / p.r. 2,5:1 (PBO)
Installation: Banjo bolt M20x1,5 / M22x1,5
Boom cylinders; fine control plungers available on request

Counterbalance valves
H53 series: 70 L/min / 420 bar / p.r. 1,6:1 - 2,6:1 (PBO)
Installation: Flanged 40 x 48
Boom cylinders; with heavy duty seals

Counterbalance valves
H50 series: 70 L/min / 420 bar / Double acting
Installation: Flanged
Boom cylinders; damped piloting (VIP02 patented); fine control plungers available on request

Pilot operated check valves
6D series: 60 L/min / 350 bar
Installation: Flanged / In-line
Outrigger and crossbar cylinders; single and double acting; hardened seats on request

Counterbalance valves
H50 series: 70 L/min / 420 bar / p.r. 4:1
Installation: Flanged 40x 48
Outrigger and crossbar cylinders

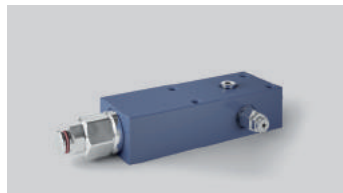
New developments and special features



LHD-Y series

NEM's range of load lowering control valves (ISO 8643)

NEM's joystick operated load lowering control valves, the Y series (EN474; ISO 8643), are definitely a step forward in matching the directional valve spool metering characteristics without any compromise. Extended plunger strokes and accurate fine metering allow to fix their opening pilot pressure closest to the joystick's starting position. This way the operators can operate safely without feeling any difference in comparison with the standard versions without load lowering control valves.



VIP-02

**Valve to Intercept Pilot signals
European patent - EP2342253**

When the machine's boom lowering stability is an issue, NEM can provide a patented pilot damping device that ensures the stability of hydraulic lifting equipment during lowering manoeuvres, especially on those applications characterized by load sensing flow control systems or by variable displacement pumps.

This device (VIP-02) allows a stable piloting and quick opening in order to reach a stable performance and a fast response time regardless of oil viscosity.



U-valves concept

**Energy saving & electrification
from NEM motion control valves**

Energy saving and electronics Vs reliability, a challenge that NEM engineers are ready to play by the U-valves program.

The U-valves program promotes functional principles that: bring the gravity to drive load lowering operations and the motion control valves electrification.

Through the U-valves program NEM's engineers support our customers in developing innovative energy saving solutions.



NVD2

**New: flow sensing control valve
with on-off actuation**

NVD2 is a highly innovative directional control valve, its technology (patented) impressively joins constructive simplicity and high functional performance.

The flow sensing working principle which characterizes the NVD2 valves makes the flow control independent from simultaneous loads with a great stability.

In addition to the typical electroproportional controls, is now available an On/Off actuated version, which allows to simplify the electric control without compromising the Flow Sensing multifunctional working features.

Products to fit any of your needs

Ideas to enhance your performance

NEM, founded in 1995, is a valve manufacturer specialising in the development of hydraulic solutions for mobile, agricultural and industrial applications.

Our goal is to be a reliable partner, providing our customers a state of the art service, delivered by highly qualified technical staff, to achieve customized solutions.

At NEM we are aware that the future of the hydraulic industry is in system engineering. Therefore we are developing and manufacturing top quality products, which can be fully integrated into many different applications. NEM components

ensure the highest level of performance and safety in any application; this, together with our focus on innovation, has gained us the trust and appreciation of leading machine manufacturers worldwide.

NEM's products can count on a wide range of options, from cartridge valves and hydraulic integrated circuits to Parts-In-Body counterbalance valves and flow control valves.

All our products can be selected from our catalogues or customised by NEM's application engineers to develop a se-

lection of valves specifically designed for different applications in order to respond to any of our customer needs.

Last but not least, NEM can also provide its own range of compact directional control valves, rated for metered flows up to 70 L/min.

All these products, together with our innovative solutions for load and flow sensing control valves demonstrate our attitude towards engineering fluid power solutions.

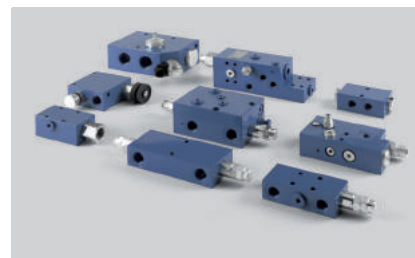
Mechanical and Electrical Cartridge Valves

Pressure control valves	p_{max}	350 bar
Counterbalance valves	Q_{max}	300 L/min
Directional control valves	Cavity	up to SAE 20
Flow control valves		



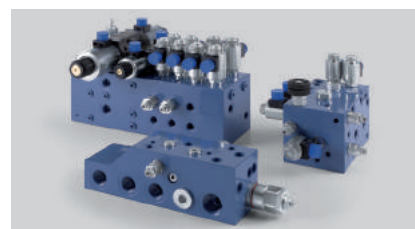
Parts-in-Body Valves

Load holding / Motion control valves	p_{max}	420 bar
Boom lowering control valves	Q_{max}	500 L/min
PO check valves	Ports	up to 1 1/4 SAE6000
Pressure control valves		
Flow control valves		



Hydraulic Integrated Circuits

Weight lifting	p_{max}	350 bar
Earth moving	Q_{max}	200 L/min
Agricultural vehicles		
Industrial vehicles		



Directional Control Valves

Flow sensing	p_{max}	350 bar
Load sensing	Q_{max}	70 L/min
Load independent	Ports	BSP 3/8"

