

Competence with a Firm Foundation.

Integrated into the **HYDAC Group** the specialised products and systems from **Nordhydraulic** can be offered through **HYDAC's** strong sales organization.

Nordhydraulic and HYDAC together can provide highly individual solutions, tailored to customer requirement, in addition to standard products for mobile systems.

Therefore a team of technical product specialists has been appointed to pool the know-how and experience of both companies in mobile applications. We can therefore support your projects with extensive engineering services, joint product development and testing.

With more than 6,000 employees worldwide, **HYDAC** is one of the leading suppliers of fluid technology, hydraulic and electronic equipment.

Our wide range of products, combined with our expertise in development, manufacturing, sales and service enables industry worldwide to overcome the most diverse problems.

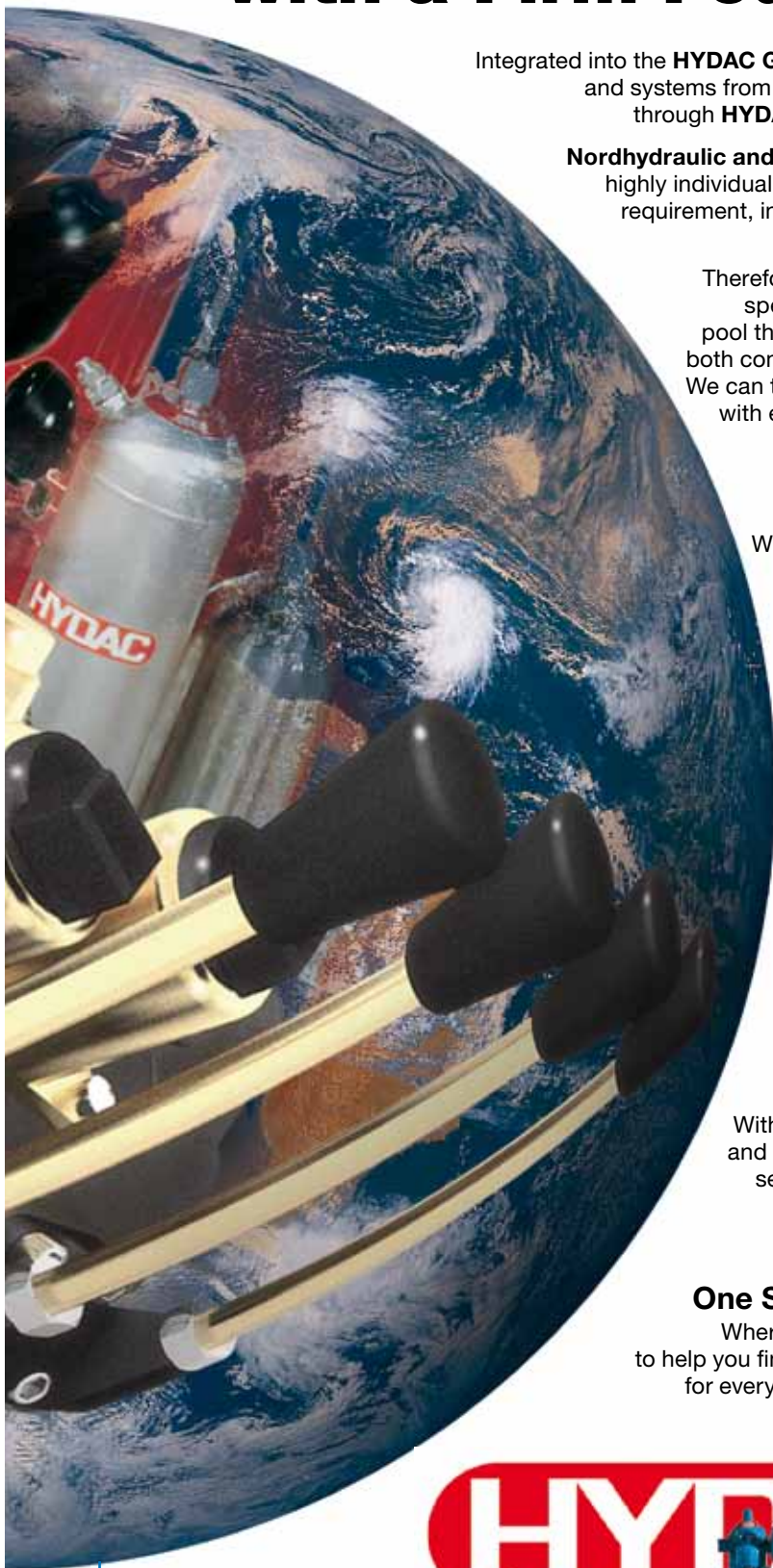
Our quality and environment certification to ISO 9001/2000 and ISO 14001 denote first class quality and responsible management of our resources.

Global yet Local.

With over 45 overseas subsidiaries and more than 500 distributors and service partners, **HYDAC** is your reliable partner worldwide.

System Solutions. One Supplier. One Contact.

Wherever you need us, we are there to help you find the most effective solution – for every application, from components to a complete system.





Nordhydraulic Kramfors SE



HYDAC Denmark



HYDAC China



HYDAC USA



HYDAC Italy





HYDAC France



HYDAC Sulzbach/Saar, Plant 8

Global Presence. Local Expertise.



-  Nordhydraulic Headquarters
-  Nordhydraulic Facilities
-  HYDAC Headquarters
-  Companies
-  Distributors and Service Partners



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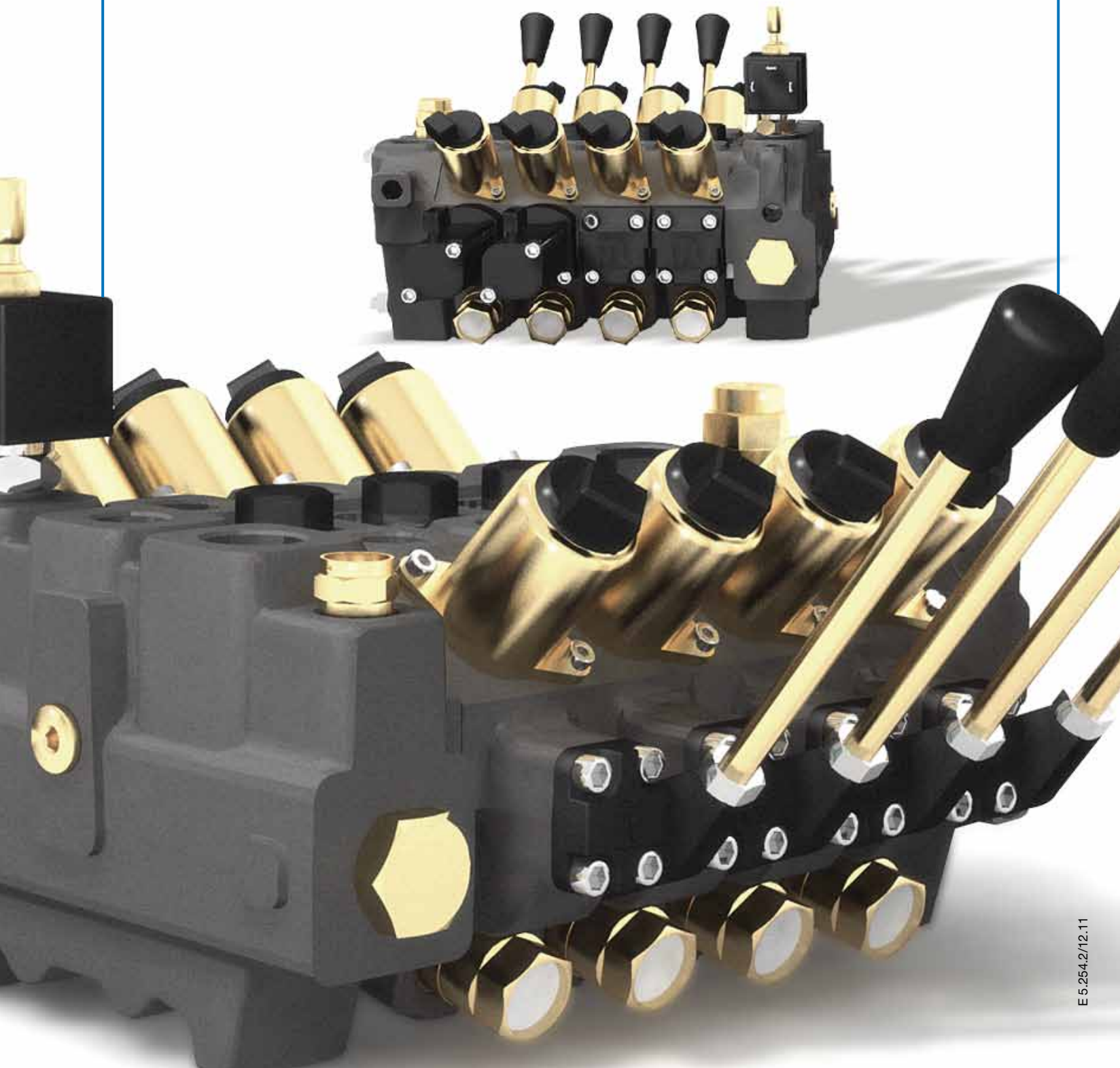




Nordhydraulic

HYDAC INTERNATIONAL

Directional Control Valves.





Your Partner for Directional Control Valves.

Results based on co-operation.

Nordhydraulic is a globally represented manufacturer of directional control valves for mobile applications.

Nordhydraulic directional spool valves fulfil the requirements of truck loading cranes, excavators, skip loaders / demountable bodies, wheel loaders, forestry equipment and other specialised machinery.

The valves are characterised by highly advanced design solutions, including customised spools. Our objective is to optimise the controllability and performance of the machine.

The **Nordhydraulic** network of top-quality suppliers and partners, in combination with our own foundry and our high performance production provides us with the capacity to serve and satisfy all customers, regardless of size and volumes.

Cutting-edge expertise is constantly on hand and you, our customer, can always rely on receiving the very best.

Adequate quality requires control of every step of the production process, from casting to complete product.

It is for this reason that we have our own foundry, specialised in casting grey and spheroidal graphite cast iron.



Directional Control Valves Monoblock.

RM 230



RM 313



RM 270



RMB 202



Type	Rated flow l/min	System pressure* bar	No. of sections	Secondary valves	Remote control options				Electric unloading	Hydr. spool kickout	Connections BSP**
					Cable	Pneum.	Electr. pneum.	Hydr. prop.			
RM 230	70	300	1 – 4		•	•	•	•	•	•	1/2"
RM 270	160	300	1 – 4 and 6	•	•	•	•	•	•		3/4", 1"
RM 313***	120	225	3	•	•	•	•	•		•	3/4"
RMB 202	70	300	2	•	•						1/2"

* Depending on application and configuration.

** Other port threads on request.

*** Available for special applications.

For manual operation of our valves we can supply a range of hand levers, linear and joystick versions.

Directional Control Valves Sectional.

RS 160



RSQ 240



RS 210



RS 270 / RS 280



RS 220



RSM 290



Type	Rated flow l/min	System pressure* bar	No. of sections	Remote control options					Electric unloading	Q-function	Hydr. spool kickout	Electr. spool position indicator	Connections BSP**
				Cable	Pneum.	Electr. pneum.	Hydr. prop.	Electr. hydr. prop. on/off					
RS 160	45	350	1 – 10	●	●	●	●	●	●		●	3/8"	
RS 210	70	350	1 – 10	●	●	●	●		●	●	●	1/2"	
RS 220	80	350	1 – 10				●	●	●	●	●	1/2"	
RSQ 240	100	350	1 – 10				●	●	●	●	●	1/2"	
RS 270	120	350	1 – 10	●	●	●	●				●	3/4"	
RS 280	120	300	1 – 10	●	●	●	●				●	3/4"	
RSM 290	140	350	1 – 10	●			●	●	●	●	●	3/4"	

* Depending on application and configuration.
 ** Other port threads on request.

For manual operation of our valves we can supply a range of hand levers, linear and joystick versions.



Selector Valves.

Front Loader Block



Two-way and three-way functions for flow rates from 20 to 160 l/min at max. 350 bar, depending on the application. Numerous spool and remote control options; also possible in combination with suspension modules.

Load-Holding and Counter-Balance Valves.

SBVE-, RS series



System modules for various flow rates and control ratios.

Pilot Control Modules.

Pilot Control Blocks



Pilot control blocks for different applications (20 – 60 bar), in different combinations, integration of pressure accumulators and filters possible.

Remote Controls for Valves



Wide range of remote controls available in single to triple axis. Joysticks / hand levers with different electrical function transmitters available according to customer requirement.

System Electronics.

Electronic Remote Controls



Electronic operating elements available with integrated or external keypad or integrated display.

Radio Controls



Complete remote control systems for proportional operation in different applications.

Electronic Control Equipment



From simple to high-end controls for complex and safety-relevant applications (SIL 2-3).

Displays



Displays for visualisation solutions available in different sizes and models.

Electro-hydraulic Components and Systems Solutions for:

Cranes



- Controllability – Spool design
- Safety regulations – Overload protection, load holding valves
- Low power losses – Smart system solutions

Forest Cranes



- Safety – Protection against incorrect connection
- Ergonomics – Design and weight
- Ergonomically designed for ease of use – Manual 3-axis levers

Wheel Loaders



- Customised – Developed section by section, adapted inlets and outlets
- Limited space in cabin – Adapted levers
- Lowering speed control – Adapted spools

Front Loader



- Very low leakage – Design experience and manufacturing
- Adapted to available space – Pioneers in compact design
- Environmental requirements – A robust monoblock valve
- System requirements – Adjusted to the vehicle
- Distribution – The front loader manufacturer does not supply a complete system

Tipper Trucks



- Low pressure drops – Fast lowering
- Multiple functions – Quick and simple thanks to combination valves

Trucks – Specialised Vehicles



- Customised –
- Combination of various sizes
- Monitoring of the lowering speed – adapted and manually adjustable spools