



POWER TRANSMISSION VALVES



VDF H15 – VDF H25. FREEWHEELING VALVES.

Methodology :

This document is intended for manufacturers of machines that incorporate Poclairn Hydraulics products. It describes the technical characteristics of Poclairn Hydraulics products and specifies installation conditions that will ensure optimum operation.

This document includes important comments concerning safety. They are indicated in the following way:



Safety comment.

This document also includes essential operating instructions for the product and general information. These are indicated in the following way:



Essential instructions.



General information .



Information on the model number. Information on the model code.



Weight of component without oil.



Volume of oil.



Units.



Tightening torque.



Screws.



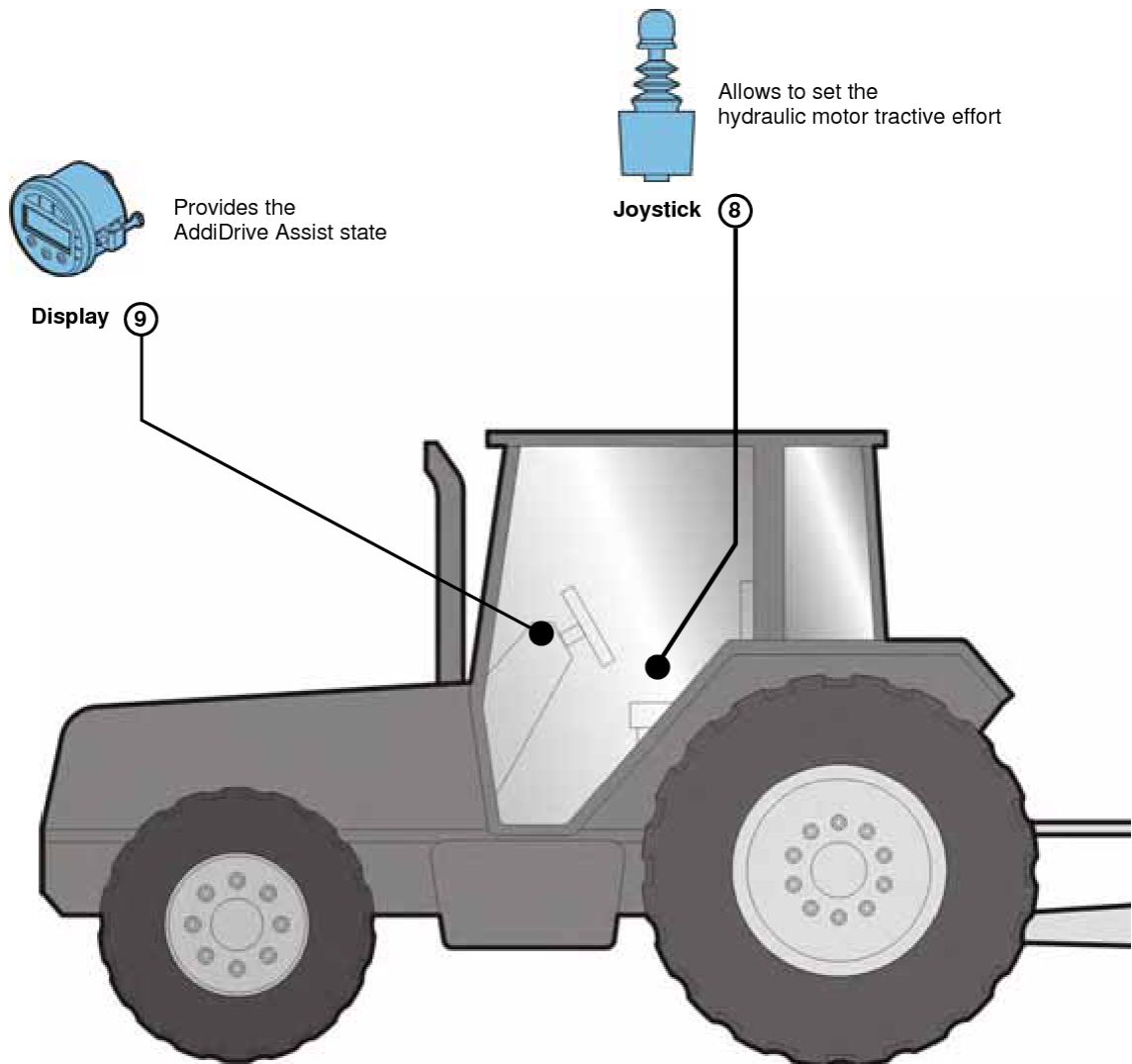
Information intended for Poclairn-Hydraulics personnel.

The views in this document are created using metric standards.

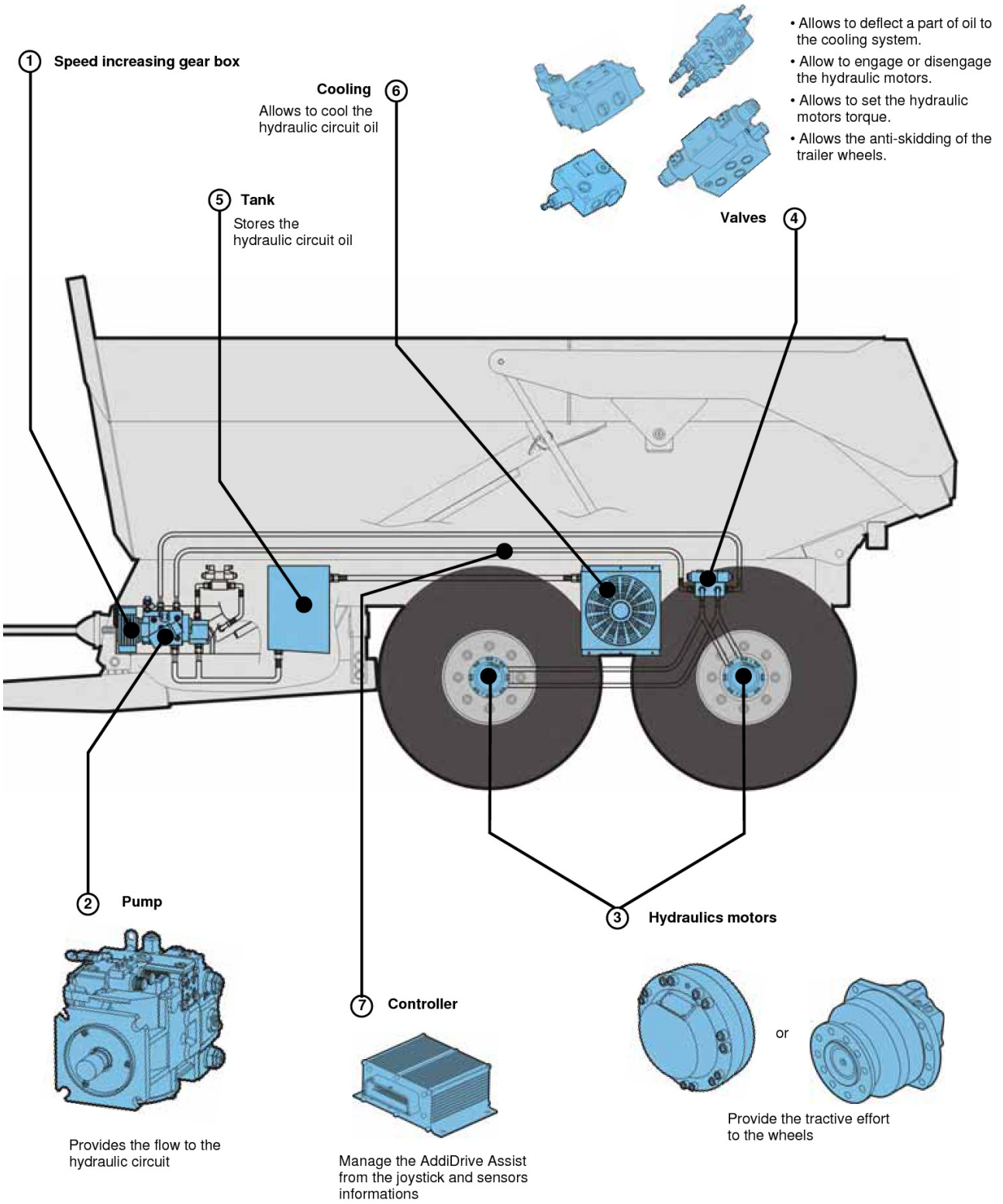
The dimensional data is given in mm and in inches (inches are between brackets and italic)



DESCRIPTION



Mark	Designation	Quantity
1	Speed increasing gear box	1
2	Pump	1
3	Rigid powered axle	1 or 2
	Hydraulics motors	2 or 4
4	Flushing valve	1
	Free-wheeling valves	1
	Torque control valve	1
	Flow divider	1
5	Tank	1
6	Cooling system	1
7	Controller + Software	1
8	Joystick	1
9	Display	1

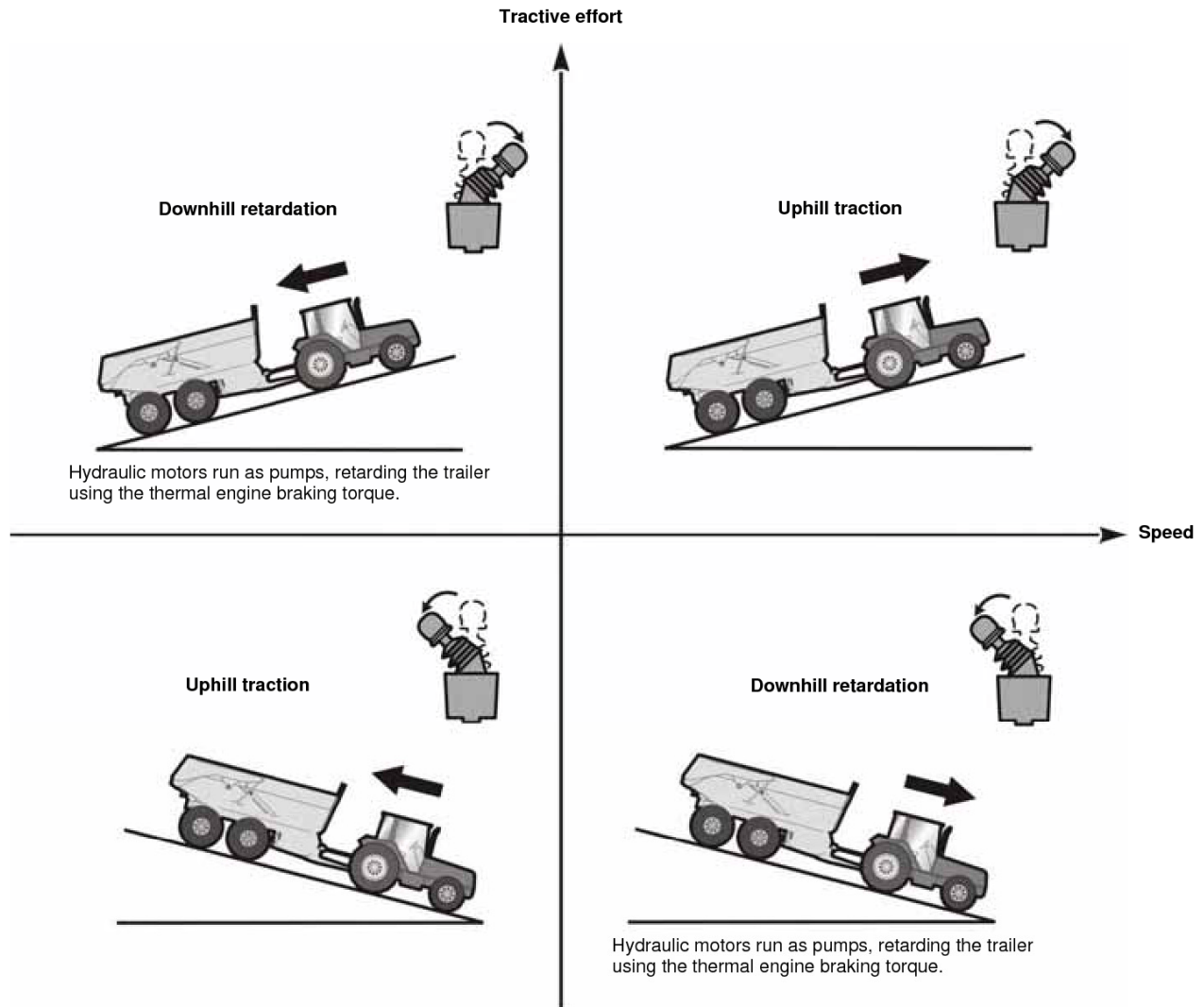


Principle of use

AddiDrive Assist only uses the tractor Power Take Off (PTO) as power supply. The pump is connected to the PTO and provides the hydraulic flow to the hydraulic motors. The trailer can be easily coupled and uncoupled to any tractor.

All the AddiDrive Assist components are embedded on the trailer. The human/machine interface (display, joystick) is carried off in the cab by a cable.

From the cab interface, the driver can engage or disengage the assist drive on the fly. With the joystick, the driver can select the drive direction, increase traction or retardation.



In case of braking:

- In traction mode, the assist drive is disengaged,
- In retardation mode, the assist drive is maintained to use the hydrostatic braking.

As an option, a hydraulic differential locking system, using a flow divider, can be added to help synchronising the trailer wheels.

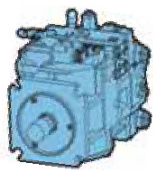
Benefits

The benefits of the AddiDrive Assist to end users include:

- **Greater off-road capacity**
By increasing the driveability of fully loaded trailers on rugged, muddy or sloping terrain.
- **Greater safety**
By guaranteeing the trajectory of the trailer during descents and thus its safety thanks to the hydraulic assistance's restraining capacity.
- **Greater productivity / Savings**
The assistance enables operators to achieve savings in fuel and to reduce their investments:
 - by increasing the trailer's payload without increasing the tractor's power,
 - by enabling the same payload to be shifted while reducing the required power of the tractor.

AddiDrive Assist components

Pump



- P90 / 055
 - P90 / 075
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Motors

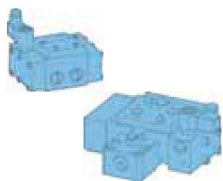


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- MS 05
 - MSE05
 - MS 08
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Flow divider



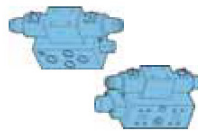
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Torque control valve



- VMPL
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Free-Wheeling valve



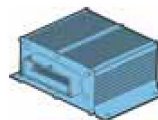
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Exchange valve



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Controller + software



- SmartDrive Easy Plus
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Speed Sensor



- Speed sensor T4
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Joystick



- Joystick
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Display



- SD Display 1.5
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FREE-WHEELING VALVES



✓ VDF H15



✓ VDF H25

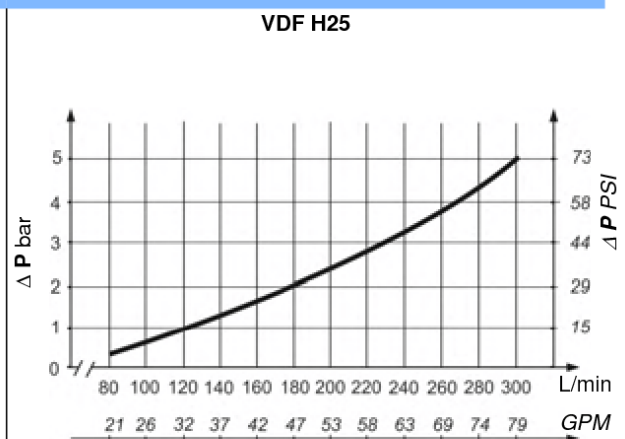
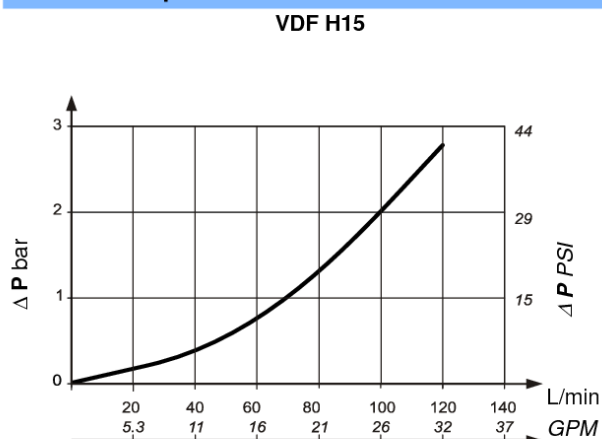
Function

Allow to engage or disengage the hydraulic motors.

Features

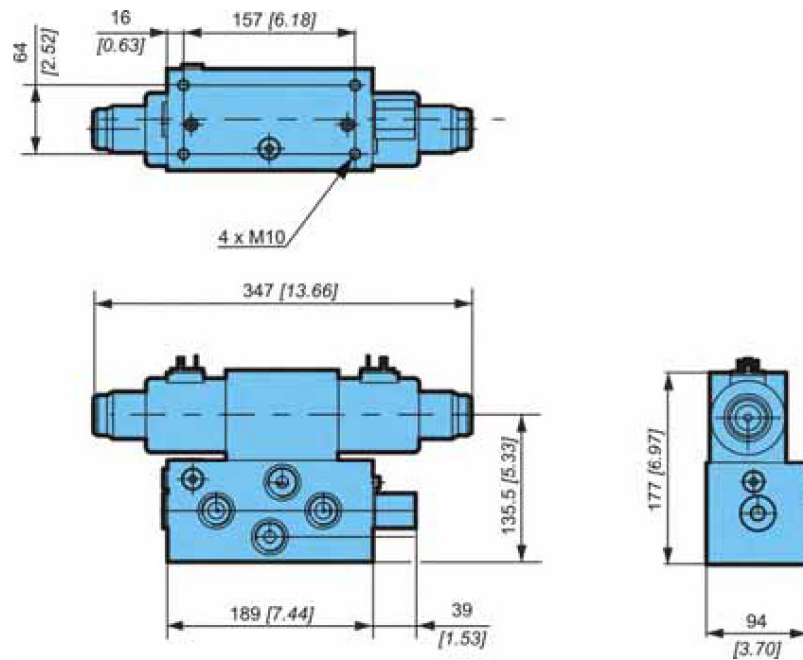
	VDF H15	VDF H25
Mass	18.6 kg [41 lb]	22 kg [48.5 lb]
Flow	120 L/min [31.7 GPM]	260 L/min [70 GPM]
Control pressure	6 to 9 bar [90 to 130 PSI]	7 to 10 bar [100 to 145 PSI]
Max. pressure	450 bar [6 527 PSI]	

Pressure drop

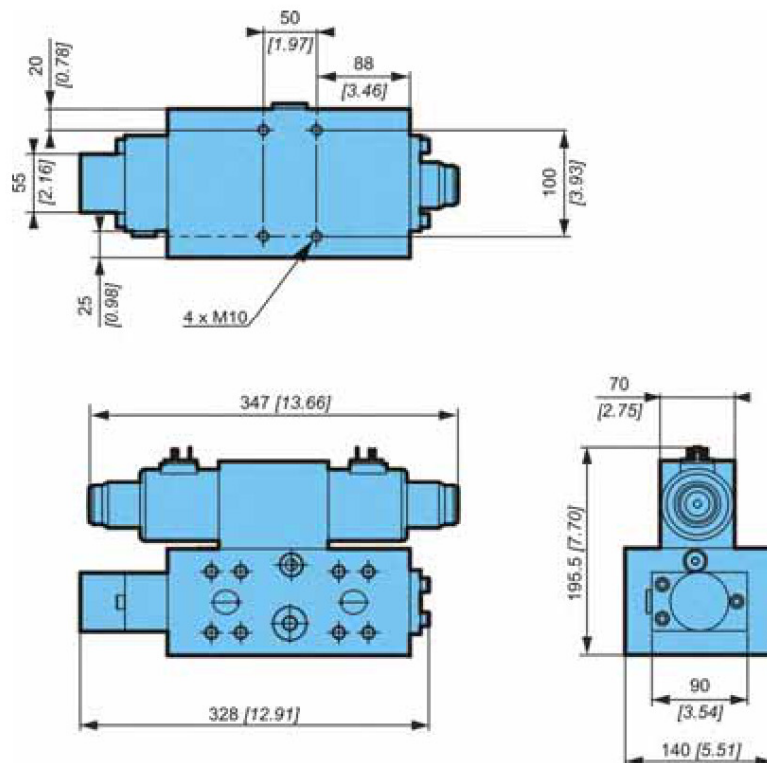


Dimensions

VDF H15



VDF H25



See technical catalogue N°A01887B for further informations.