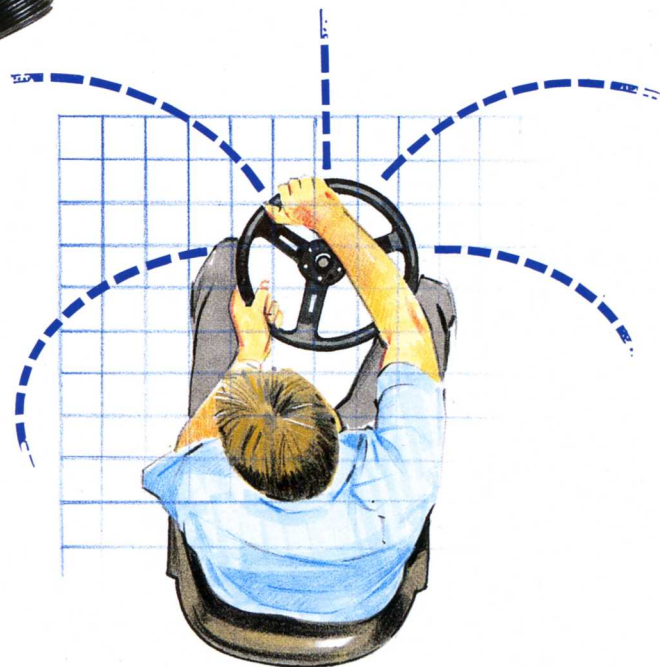


# *OSPM Mini Steering Unit for Small Vehicles*



# Small and Compact



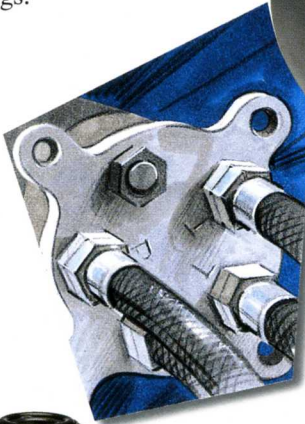
## Easy to install

The small dimensions and low weight of the OSPM steering unit make it easy to install in areas with space limitations. A version with integrated steering column results in simple assembly on the production line.



## Streamlined connection

End ports with integrated fittings mean streamlined assembling of hoses and pipes. Thus the customer avoids buying and mounting fittings.



## Exchangeable fittings

Fixing the steering unit by means of the end-cover thread provides a flexible, stable and easy installation. The integrated fittings are easy to replace if damaged.



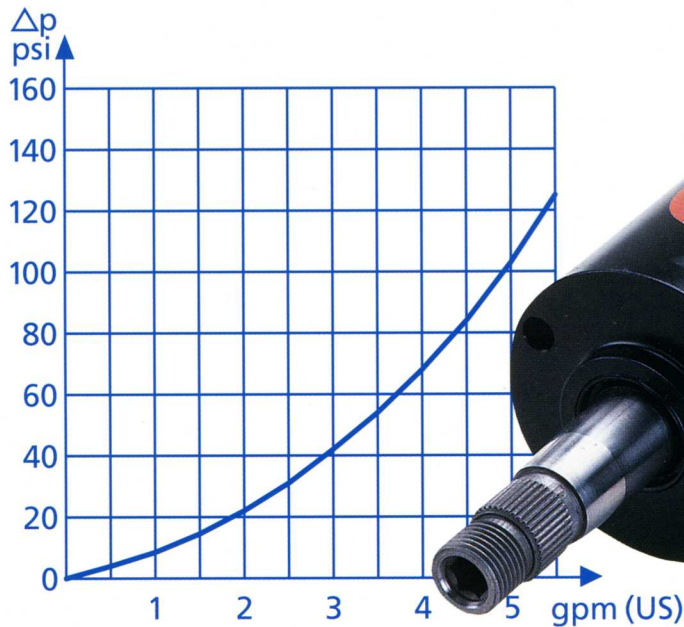
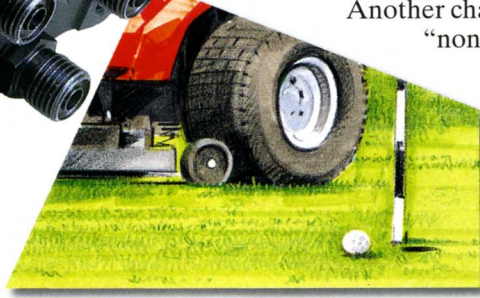
# Clean and safe



## Potential leakage is minimized

OSPM has optimum protection against external leakage. The integrated end-port fittings of the ORFS design are sealed with O-rings.

After assembly, the steering unit is checked for leakage. Another characteristic feature is a new patented "non-slip" shaft seal.



## Energy saving

OSPM has a low pressure drop in neutral, i.e. 75 psi (5 bar) at a flow of 4 gpm (15 l/min). This results in an energy-saving steering system with low heat generation and less wear of the hydraulic oil.



## Low input torque

The patented Danfoss "non-slip" shaft seal together with specially optimised springs gives a low input torque. This ensures easy and precise steering in all driving situations.



# Precision and reliability



## Genuine steering comfort

The mini steering unit provides a stable, reliable steering performance under all circumstances, whether driving straight ahead or performing rapid operations. Optimum precision is obtained with the version featuring the integrated steering column, eliminating any kind of steering backlash.

## Proven design

The mini steering unit consists of a rotary valve and meter. The design is based on the accepted principles for design and production of our fully hydraulic steering units.

## Main characteristics

Versions: Open-centre, non-reaction (ON)  
Power Beyond (PB)

Max. system pressure: 1525 psi (105 bar)

Flow range: 0 - 5.3 gpm (0-20 l/min)

Max. tank pressure: 145 psi (10 bar)

System temperature: 195°F (Max. 90°C)  
Min. -22°F (-30°C)

Oil viscosity: 4500 SSU (Max. 1000 cSt)  
40 SSU (Min. 4 cSt)

Input torque:  
powered: 10 - 15 lbf-in (0.8 - 1.5 Nm)  
non-powered: 700 lbf-in (max. 80 Nm)

Displacement: 1.9 - 4.9 in<sup>3</sup>/rev (32 - 80 cm<sup>3</sup>/rev).

Ports: 9/16 - 18 UNF ORFS integrated  
end-port fittings.

All OSPM versions have a check valve for manual steering. Optional relief valve and/or suction valves are available.

# *Flexible and versatile*

## **Applications**

The fully hydraulic OSPM steering unit from Danfoss has been developed especially for small vehicles, a field of application with increasingly growing demands on reliability and comfort.



# Quality and world-wide support



## Service, people and innovation

With more than 15,000 staff, Danfoss is one of the leading manufacturers of mechanical and electronic precision components. The strength of our company within production and quality control is a result of intensive research and development.

We have modern factories on four continents, besides sales companies and representatives in more than 100 countries.

Add to this the authorized service shops eager to serve you on six continents.



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