



Bulletin MSG11-5715-735/UK

General Instructions



Industrial Hydraulic Valves

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WARNING — USER RESPONSIBILITY

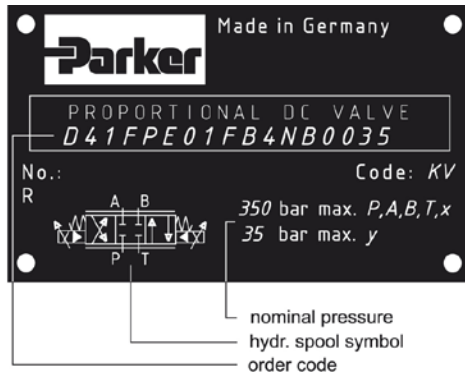
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The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

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1. Example Name Plate



2. Safety Instructions

Please read the operation manual before installation, startup, service, repair or stocking! Paying no attention may result in damaging the valve or incorporated system parts.

Symbols

This manual uses symbols which have to be followed accordingly:



Instructions with regard to the warranty



Instructions with regard to possible damaging of the valve or linked system components



Helpful additional instructions

Marking, Name Plates

Instructions applied on the valve, i.e. wiring diagrams and name plates, must be observed and maintained legibly.

Work at the Valve

Workings in the area of installation, commissioning, maintenance and repair of the valve may only be allowed by qualified personnel. This means persons which have, because of education, experience and instruction, sufficient knowledge on relevant directives and approved technical rules.

3. Important Notes on the Use

Common Instructions

We reserve the right for technical modifications of the described product. Any images and drawings are simplified representations. The technical specifications and dimensions are not binding. No claim may result out of it. Copyrights are reserved.

Intended Usage

This document applies to industrial hydraulic valves from Parker Industrial Systems Division Europe (ISDE). These products have been designed, developed and manufactured for standard industrial use. They must not be used for any other purposes than the ones specified in the catalogue or the associated technical documentation. Proper and safe operation depends on the products being transported, stored, lined up, mounted, installed, put into service, operated, and serviced correctly. Ambient conditions must be within the admissible limits. Notes and information in the associated documentation apply at all times.

Liability

The manufacturer does not assume liability for damage due to the following failures:

- incorrect mounting / installation
- improper handling
- lack of maintenance
- operation outside the specifications



Do not disassemble the valve! In case of suspicion for a defect please contact Parker.

Storage

In case of temporary storage the valve must be protected against contamination, atmospheric exposure and mechanical damages. Each valve has been factory tested with hydraulic oil, resulting in protection of the core parts against corrosion. Yet this protection is only ensured under the following conditions:

Storage period	Storage requirements
12 months	constant humidity < 60 % as well as constant temperature < 25 °C
6 months	varying humidity as well as varying temperature < 35 °C



Outdoor storage or within sea and tropical climate will lead to corrosion and might disable the valve!

4. Mounting / Installation

Scope of Supply

Please check immediately after receiving the valve, if the content is matching with the specified scope of supply.

If a cable socket is required to connect the valve, the central connector assembly has to be ordered separately and is not included in the delivery.

➡ Please check the delivery immediately after receiving the shipment for apparent damages due to shipping. Report shipment losses at once to the carrier, the insurance company and the supplier!

Mounting

- Compare valve type (located on the name plate) with part list resp. circuit diagram.
- Unrestricted mounting position.
- Verify the mounting surface for the valve. Unevenness of 0.01 mm/100 mm, surface finish of 6.3 µm are tolerable values.

➡ Keep clean valve mounting surface and work environment!

- Remove protection plate from the valve mounting surface
- Check the proper position of the valve ports and the O-rings.
- Mounting bolts according to product catalogue, use property class 12.9, ISO 4762

➡ Parker offers bolt kits, please see product catalog for the ordering code.

- Tighten the bolts crisscross with the torque specified in the product catalogue.

⚠ Insufficient condition of the valve mounting surface might create malfunction! Incorrect mounting resp. bolt torque may result in abrupt leakage of pressure fluid on the valve ports.

Operation Limits

The valve may be operated within the determined limits only. Please refer to the “technical data“ section as well as to the “characteristic curves“ in the catalog.

⚠ Follow the environmental conditions! Unallowable temperatures, shock load, aggressive chemicals exposure, radiation exposure, illegal electromagnetic emissions may result in operating trouble and may lead to failure! Follow the operating limits listed in the “specifications“ table!

Pressure Fluids

The following rules applies for the operation with various pressure fluids:

⚠ This information serves for orientation and does not substitute user tests among the particular operating conditions. Particularly no liability for media compatibility may be derived out of it.

Mineral oil: usable without restriction.

For operation with the following pressure fluids please consult Parker:

HFA	oil-in-water emulsion
HFB	water-in-oil emulsion
HFC	Aqueous solution (glycols)
HFD	anhydrous fluids (Phosphor-Ester)

➡ For detailed information concerning pressure fluids note VDMA-document 24317 as well as DIN 51524 & 51502.

Special gaskets may be available depending on the utilized fluid.

In case of insecurity please consult Parker.

5. Air Bleeding of Hydraulic System

During initial startup, after an oil change as well as after the opening of lines or valves the hydraulic system must be air bled.

Filter

The function and lifetime of the valve are strongly affected by the cleanliness of the fluid. Purity level class of 18/16/13 acc. DIN ISO 4406 is required.

Flushing

It is recommended to flush the pipelines by short circuiting the pressure and return lines. This prevents the installation dirt from entering the valve.

6. Maintenance



Service work may only be carried out by qualified personnel. Detailed knowledge of the machine functions concerning switching on and off as well as of the required safety relevant technical tasks is required!

Periodical maintenance is essential for the longevity of the system and guarantees reliability and availability. The following properties of the system has to be checked in continuous short time intervals:

- oil level in the tank
- max. working temperature
- condition of the pressure fluid (visual inspection, color and smell of hydraulic fluid)
- working pressure levels
- gas pre-load pressure on the pressure accumulator (if available)
- leakage on all system components
- condition of filter elements
- condition of hose lines
- cleanliness of components

After a certain operating duration a change of the hydraulic fluid is required. The frequency of change depends from the following circumstances:

- kind resp. grade of the pressure fluid
- filtering
- operating temperature and environmental conditions

Repairs / Customer Service

Only the manufacturer or customer service providers authorized by the manufacturer may do repairs and perform corrective maintenance.

Warrenty

The statutory period and conditions of warranty apply. Warranty expires if unauthorized attempts are made to repair the unit / product or any other intervention is performed.

Taking out of Service

Sort and dispose of electronic components by type. For details on proper disposal please check your national laws and regulations making sure that your method of disposal complies with them.

Treat the packaging as recyclable paper and cardboard.