Recommendations & Specifications
for hydraulic equipment and facilities

Issue: 10/2022

General

Specifications	In accordance with VDI 3267 to 3284
Terms and symbols	In accordance with DIN ISO 1219
Units	SI-units as per ISO 1000
Dimensions without tolerances	DIN 7168-m
Connection thread	Whitworth®British standard pipe thread, type X as DIN 3852, data sheet 2, (for cylindrical screwed plugs)
Fittings	As per DIN 2353, screwed plugs type B as per DIN 3852, sealing by knife edge or elastic-sealing. Do not use additional sealing materials (e.g. Teflon ribbon) or tapered connection thread (e.g. NPT-thread).
Recommended oils	Oil temperature °C — Designation as per DIN 51524 10 - 40 — HLP 22 15 - 50 — HLP 32 20 - 60 — HLP 46
Sealing material	- NBR (Acrylnitril-Butadien-Caoutchouc, e.g. Perbunan®), - FKM (Fluorine-Caoutchouc, e.g. VITON®), - PTFE (alone or with additional materials), PU, special materials in accordance with function requirements

Clamping Elements

Mounting position	Any, if not otherwise stated
Operating pressure	see product-specific data sheet
Ambient temperature	-10 °C up to +60 °C
Piston transverse forces	max. 5% of the nominal piston force
Admissible piston stroke speed	max. 0,25 m/s (attention to product-specific data sheet indications)
Operating method	- single-acting, without or with spring reset of the piston (Reset times cannot be defined) - double-acting
Temperature influence	All media expand differently when temperatures rise. The hydraulic oil also tries to expand. Similarly a fall in temperature leads to a decrease in pressure. Generally one can assume that change of 1°C alters the pressure by approx. 10 bar. For that reason fixtures that are uncoupled from the power unit should be equipped with a pressure accumulator in order to reduce the influence of temperature.
Lifetime	In the case of single-acting cylinders with spring reset, it is essential to prevent the ingress of fluids and dirt particles into the spring chamber.
Accident prevention regulations	Always comply with the applicable accident prevention regulations. In particular avoid risks of trapping or squashing fingers etc. During strokes of the cylinder (DIN 31001, section 1).
Commissioning & Maintenance	Take care to ensure scrupulous cleanliness when assembling hydraulic components. Use only clean, specified pressure medium. Bleed the hydraulic system before putting into operation. Adhere to the manufacturer's instructions and maintenance intervals.

Rotary Couplings

Installation conditions	Rotary couplings may be fixed (screwed) only on one side. The opposite side may be secured against twisting. It is to be avoided that no bending moment is effected on the standing or rotating element. Only the firmly bolted side may be piped. The other side should be supplied with pressurized oil via flexible hoses only.
Operating pressure, Ambient temperature, Max. rotary speed	For these data refer to the relevant data sheet and/or the respective built-in drawing.
Commissioning & Maintenance	Take care to ensure scrupulous cleanliness when assembling hydraulic components. Use only clean, specified pressure mediums. Bleed the hydraulic system before putting into operation. Rotary couplings are not subject to regular maintenance intervals.