



YOKOHAMA / HYDRO S

TECHNICAL DATA SHEET | TDS

HIGH VISCOSITY INDEX HYDRAULIC OILS HV / HVLP

22 / 32 / 37 / 46 / 68

PRODUCT DESCRIPTION

YOKOHAMA HYDRO S is a high-viscosity-index hydraulic oil range designed to support lubrication and wear control across a wide range of operating temperatures. Its viscosity-temperature characteristics help maintain fluidity during cold starts and a protective lubricating film under normal operating conditions. Oxidation stability, rust and corrosion control, water separation, filterability, air release and foam resistance support reliable operation of hydraulic pumps and control elements.

APPLICATIONS

Intended for fixed and mobile hydraulic power systems requiring HV/HVLP-type fluids, particularly where ambient or operating temperatures vary. Suitable applications include construction and agricultural machinery, cranes, outdoor power units, presses, plastic injection moulding equipment and selected marine hydraulic circuits. The appropriate grade depends on pump design, service pressure and thermal conditions. Applications specifying fire-resistant or biodegradable fluids require separate products.

PERFORMANCE SPECIFICATIONS

|                            |                                                      |
|----------------------------|------------------------------------------------------|
| DIN   51524-3 HVLP         | FIVES CINCINNATI   P-68 (32) / P-70 (46) / P-69 (68) |
| ISO   11158 HV / 6743-4 HV | BOSCH REXROTH   RE 90220 (32 / 46 / 68)              |
| ASTM   D6158 HV            | U.S. STEEL   126 / 127                               |
| EATON   E-FDGN-TB002-E     | EATON VICKERS   M-2950-S / I-286-S3                  |
| JCMAS   P041 HK            | PARKER DENISON   HF-0 / HF-1 / HF-2 (32 / 46 / 68)   |
| GM   LS-2                  | SAE   MS 1004                                        |

TYPICAL TECHNICAL CHARACTERISTICS

| PROPERTY                             | TEST METHOD | TYPICAL VALUE |        |        |        |        |
|--------------------------------------|-------------|---------------|--------|--------|--------|--------|
|                                      |             | 22            | 32     | 37     | 46     | 68     |
| Kinematic Viscosity at 40°C (mm²/s)  | ISO 3104    | 22.00         | 31.83  | 37.00  | 45.90  | 67.63  |
| Kinematic Viscosity at 100°C (mm²/s) | ISO 3104    | 4.90          | 6.23   | 7.33   | 8.07   | 10.73  |
| Viscosity Index                      | ISO 2909    | 153.50        | 153.50 | 166.67 | 153.00 | 149.00 |
| Density at 15°C (kg/m³)              | ISO 12185   | 838.50        | 850.33 | 867.00 | 858.00 | 862.00 |
| Flash Point (COC) (°C)               | ISO 2592    | 212.50        | 216.33 | 207.50 | 226.00 | 242.00 |
| Pour Point (°C)                      | ISO 3016    | -48.00        | -46.00 | -40.67 | -42.00 | -39.00 |

Note: The values shown in this table are typical values and do not constitute product specifications. Minor variations may occur between production batches due to normal manufacturing tolerances.