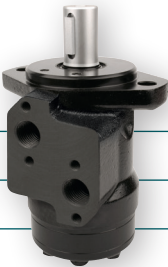


HYDRAULIC MOTORS

→ The industry leading range of gerotor orbital hydraulic motors offered in spool, commutator and disc/orbiting valve providing the industry standard for smooth startup and the highest efficiency for a durable and robust system.

LD - LIGHT DUTY GEROTOR ORBITAL MOTORS (SPOOL VALVE TYPE)



|             |                     |
|-------------|---------------------|
| Max. Torque | 698 Nm (6177 lb-in) |
| Max. Speed  | 2293 rpm            |
| Max. Power  | 18.7 kW (25.1 HP)   |

|                              |                               |                        |                         |                         |                          |
|------------------------------|-------------------------------|------------------------|-------------------------|-------------------------|--------------------------|
| 125<br>SERIES<br>WM_CW       | 126<br>SERIES<br>WM_CCW       | 145<br>SERIES<br>WD_CW | 146<br>SERIES<br>WD_CCW | 155<br>SERIES<br>WP_CW  | 156<br>SERIES<br>WP_CCW  |
| 157<br>SERIES<br>WPN/WPWN_CW | 158<br>SERIES<br>WPN/WPWN_CCW | 200<br>SERIES<br>RS_CW | 201<br>SERIES<br>RS_CCW | 251<br>SERIES<br>WRA_CW | 252<br>SERIES<br>WRA_CCW |
| 253<br>SERIES<br>WRE_CW      | 254<br>SERIES<br>WRE_CCW      | 255<br>SERIES<br>WR_CW | 256<br>SERIES<br>WR_CCW |                         |                          |

MD - MEDIUM DUTY GEROTOR ORBITAL MOTORS (COMMUTATOR VALVE TYPE)



|             |                       |
|-------------|-----------------------|
| Max. Torque | 1390 Nm (12300 lb-in) |
| Max. Speed  | 1060 rpm              |
| Max. Power  | 31.3 kW (41.9 HP)     |

|                            |                            |                            |                            |                              |                                   |
|----------------------------|----------------------------|----------------------------|----------------------------|------------------------------|-----------------------------------|
| 275<br>SERIES<br>WG_CCW    | 276<br>SERIES<br>WG_CW     | 277<br>SERIES<br>WG_CCW    | 278<br>SERIES<br>WG_CW     |                              |                                   |
| 280<br>SERIES<br>WG_CCW    | 281<br>SERIES<br>WG_CW     | 300<br>SERIES<br>HB        | 400<br>SERIES<br>CE_SD_CCW | 401<br>SERIES<br>CE_SD_CW    | 420<br>SERIES<br>CE_MD_CCW        |
|                            |                            |                            |                            |                              | 421<br>SERIES<br>CE_MD_CW         |
| 430<br>SERIES<br>CE_HD_CCW | 431<br>SERIES<br>CE_HD_CW  | 500<br>SERIES<br>RE_SD_CCW | 501<br>SERIES<br>RE_SD_CW  | 505<br>SERIES<br>RE_SD_CW_NG | 506<br>SERIES<br>RE_SD_CCW_NG     |
|                            |                            |                            |                            |                              | 520<br>SERIES<br>RE_MD_CCW        |
| 521<br>SERIES<br>RE_MD_CW  | 530<br>SERIES<br>RE_HD_CCW | 531<br>SERIES<br>RE_HD_CW  | 535<br>SERIES<br>RH_CW     | 536<br>SERIES<br>RH_CCW      | 540<br>SERIES<br>RE_WHEEL_HUB_CCW |
|                            |                            |                            |                            |                              | 541<br>SERIES<br>RE_WHEEL_HUB_CW  |

HD - HEAVY DUTY GEROTOR ORBITAL MOTORS (DISC/ORBITING VALVE TYPE)



|             |                       |
|-------------|-----------------------|
| Max. Torque | 3342 Nm (29580 lb-in) |
| Max. Speed  | 979 rpm               |
| Max. Power  | 66.1 kW (88.5 HP)     |

|                               |                            |                               |                               |                              |                           |
|-------------------------------|----------------------------|-------------------------------|-------------------------------|------------------------------|---------------------------|
| 350<br>SERIES<br>WS_NA_CW     | 351<br>SERIES<br>WS_NA_CCW | 360<br>SERIES<br>WS_EU        | 450<br>SERIES<br>WE_WEW_CW    | 451<br>SERIES<br>WE_WEW_CW   | 600<br>SERIES<br>DR_SD    |
| 620<br>SERIES<br>DR_MD        | 630<br>SERIES<br>DR_HD     | 640<br>SERIES<br>DR_WHEEL_HUB | 650<br>SERIES<br>WZ           | 700<br>SERIES<br>DT          | 701<br>SERIES<br>DT_WHEEL |
| 740<br>SERIES<br>DT_WHEEL_HUB | 800<br>SERIES<br>D9_CCW    | 801<br>SERIES<br>D9_CW        | 805<br>SERIES<br>D9_SHORT_CCW | 806<br>SERIES<br>D9_SHORT_CW |                           |

HYDRAULIC MOTOR | BRAKE UNITS

HYDRAULIC MOTOR | BRAKE UNITS

→ Compact and durable gerotor orbital hydraulic motors with integrated hydraulic negative disc brake with the performance to provide solutions for a variety of mobile and industrial applications.



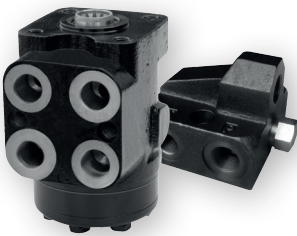
|                  |                      |            |              |
|------------------|----------------------|------------|--------------|
| Performance Data | See Hydraulic Motors |            |              |
| Holding Torque   | Nm (lb-in)           | 904 (8000) | 1582 (14000) |
| Release Pressure | bar (psi)            | 19 (275)   | 207 (3000)   |

|                                     |                                    |                                     |                                    |
|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|
| 310<br>SERIES<br>HB MOTOR/BRAKE     | 315<br>SERIES<br>HK MOTOR/BRAKE    | 410<br>SERIES<br>CE MOTOR/BRAKE_CCW | 411<br>SERIES<br>CE MOTOR/BRAKE_CW |
| 510<br>SERIES<br>RE MOTOR/BRAKE_CCW | 511<br>SERIES<br>RE MOTOR/BRAKE_CW | 610<br>SERIES<br>DR MOTOR/BRAKE     | 710<br>SERIES<br>DT MOTOR/BRAKE    |

STEERING UNITS

STEERING UNITS

→ Hydrostatic power steering systems for mobile off-highway vehicles requiring stable steering condition for safe driving and manoeuvring. Optional pressure relief, shock valve functions and flow amplifications ratio 2:1 available.



|                          |                   |            |             |
|--------------------------|-------------------|------------|-------------|
| Displacement Range       | cm³/rev (in³/rev) | 40 (2.5)   | 1000 (61.0) |
| Max. Pressure            | bar (psi)         | 210 (3045) |             |
| Max. Cont. Back Pressure | bar (psi)         | 40 (580)   |             |
| Flow Range               | lpm (gpm)         | 5 (1.3)    | 75 (19.8)   |

|                                      |                                       |                         |
|--------------------------------------|---------------------------------------|-------------------------|
| S10<br>SERIES<br>SU_S10              | S20<br>SERIES<br>SU_S20               | S70<br>SERIES<br>SU_S70 |
| PV11<br>SERIES<br>PV_MANIFOLD_DYN.S. | PV21<br>SERIES<br>PV_MANIFOLD_STAT.S. |                         |

HYDRAULIC BRAKES

HYDRAULIC BRAKES

→ Widest range of stand-alone and flange-mount hydraulic negative disc brakes for many applications requiring hold and safety brake systems in compact economical designs.



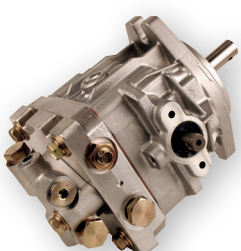
|                       |            |            |              |
|-----------------------|------------|------------|--------------|
| Release Volume        | cm³ (in³)  | 8.3 (0.5)  | 11.5 (0.7)   |
| Release Pressure      | bar (psi)  | 20 (290)   | 31 (450)     |
| Max. Release Pressure | bar (psi)  | 207 (3000) | 250 (3625)   |
| Holding Torque        | Nm (lb-in) | 225 (2000) | 1500 (13300) |

|                       |                       |                     |
|-----------------------|-----------------------|---------------------|
| 913<br>SERIES<br>BK10 | 915<br>SERIES<br>BK15 | 920<br>SERIES<br>AB |
| 925<br>SERIES<br>FB   | 930<br>SERIES<br>SB   |                     |

HYDRAULIC PUMPS

HYDRAULIC PUMPS

→ Patented series of hydraulic axial piston pumps for variable displacement with swash plate design in a very light aluminum die cast housing with integrated high volume charge pump and optional fixed displacement gear pump.



|                          |                   |            |          |
|--------------------------|-------------------|------------|----------|
| Displacement Range       | cm³/rev (in³/rev) | 10 (0.6)   | 23 (1.4) |
| Charge Pump Displacement | cm³/rev (in³/rev) | 3 (0.2)    |          |
| Max. Operating Pressure  | bar (psi)         | 145 (2100) |          |
| Peak System Pressure     | bar (psi)         | 240 (3500) |          |

|                            |                           |                            |
|----------------------------|---------------------------|----------------------------|
| 113<br>SERIES<br>CP_SF_CCW | 114<br>SERIES<br>CP_SF_CW | 115<br>SERIES<br>CP_LF_CCW |
| 116<br>SERIES<br>CP_LF_CW  |                           |                            |

FLOW DIVIDERS

FLOW DIVIDERS

→ Patented Roller Stator designed for providing extremely quiet operation combined with highest pressure compensated flow accuracy.



|                      |           |            |          |
|----------------------|-----------|------------|----------|
| Min. Input Flow      | lpm (gpm) | 8 (2)      | 19 (5)   |
| Max. Input Flow      | lpm (gpm) | 151 (40)   | 189 (50) |
| Max. Inlet Pressure  | bar (psi) | 207 (3000) |          |
| Max. Outlet Pressure | bar (psi) | 207 (3000) |          |

|                     |
|---------------------|
| 950<br>SERIES<br>FD |
|---------------------|