The Hydra-matic 4L30-E provides maximum flexibility by using electronic controls and modular construction.

**Product Summary**

**Transmission Type**  
4L30-E = 4: 4-Speed  
L: Longitudinal Mount  
E: Electronic

**Product Series**  
/c52/c76/c51/c48/c45/c69/c32/c61/c32/c52/c58

**Transmission/Engine Protection**  
• Over-rev protection  
• Engine overspeed protection  
• High-speed downshift protection  
• Extreme heat protection  
• Limp home mode

**Diagnostic Capabilities**  
*Availability of specific electronic controls features depends upon application.

**Electronic Controls Features***  

**Driver Control**  
• Driver-controlled mode switch  
• Higher gear starts  
• Shift pressure profile  
• Auto-adapt driving modes

**Adaptive Capabilities**  
• Altitude compensation  
• Temperature compensation  
• Barometric compensation  
• Adaptive pressure control  
• Cruise control / shift pattern interaction  
• AC compensation

**Max Gross Engine Weight (Estimate)**  
3.500 kg (7,716 lb)

**7-Position Quadrant**  
(P, R, N, D, 3, 2, 1)

**Current Engine Range**  
1.6L to 4.1L Gasoline  
2.5L Diesel

**Transmission Drive**  
Rear-Wheel Drive  
4-Wheel Drive

**Manufacturing Location**  
Strasbourg, France

**Maximum Engine Torque**  
350 Nm (258 lb-ft)

**Maximum Gearbox Input Torque**  
600 Nm (440 lb-ft)

The maximum torque limits are only to be used as a guide and may not be applicable under certain conditions.
Transmission Specifications

Control Systems
Shift Pattern — (2) 3-Way On / Off Solenoids
Shift Quality —
(1) Force Motor
(1) ‘High Flow’ Pulse Width Modulated Solenoid (for 3-2 Downshifts Only)
Torque Converter Clutch—
(1) 2-Way On / Off Solenoids
Additional transmission and engine sensors are provided depending on transmission /powertrain application.

Gear Ratios

<table>
<thead>
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<th></th>
<th>Base</th>
<th>Optional</th>
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<tbody>
<tr>
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<td>1.620</td>
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<td>3rd</td>
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</tr>
<tr>
<td>4th</td>
<td>0.723</td>
<td>0.723</td>
</tr>
<tr>
<td>Rev.</td>
<td>2.000</td>
<td>2.000</td>
</tr>
</tbody>
</table>

Maximum Shift Speed
1 - 2 6,500 rpm
2 - 3 6,500 rpm
3 - 4 6,500 rpm

The maximum shift speeds allowed are to be used as a guide. Each engine application must be calculated.

Transmission Fluid Type
Dexron® III

Converter Sizes Available
245 mm, 258 mm and 265 mm (Reference)

Converter Bolt Circle Diameters
For 245 mm Converter - 228.0 mm to 247.7 mm
For 258 mm Converter - 247.7 mm (Reference)
For 265 mm Converter - 227.0 mm to 247.7 mm

Converter Stall Torque Ratio Range
For 245 mm Converter - 1.63 to 2.70
For 258 mm Converter - 1.60 to 1.75
For 265 mm Converter - 1.80 to 3.00

Converter ‘K’ Factor Range
For 245 mm Converter - 122 to 260
For 258 mm Converter - 106 to 155
For 265 mm Converter - 100 to 185

Not all ‘K’ Factors are applicable across the range of Converter Stall Torque Ratios.

Transmission Fluid Capacities
Dry: 6.4L (7 qt) with 245 mm Converter

Transmission Weight
Dry: 69.1 kg (152.33 lb)
Wet: 76.0 kg (167.55 lb)

Transmission Packaging Information*
Overall Length**
730 mm to 794 mm (245 mm Converter)
774 mm to 799 mm (258 mm Converter)
799 mm to 802 mm (265 mm Converter)

Main Case (Reference)**
430.4 mm

Converter Housing
142.75 mm Minimum with 245 mm Converter
147.00 mm Minimum with 258 mm Converter
152.00 mm Minimum with 265 mm Converter

Extension Housing*
219.6 mm Minimum with Slip Yoke Design
115.0 mm Minimum with Fixed Yoke Design
70.0 mm Minimum with 4-Wheel Drive

Pressure Taps Available
Line Pressure

*All dimensions shown are nominal. See application manual for details
** Determined by customer requirements.

Information may vary with application. All specifications listed are based on the latest product information available at the time of publication. The right is reserved to make changes at any time without notice.

Hydra-matic 4L30-E

1. Converter Housing
2. Converter Clutch Assembly
3. Turbine Shaft
4. Oil Pump Assembly
5. Adapter Case
6. Overdrive Free Wheel (Roller Type)
7. Overrun Clutch Plate Assembly
8. Overdrive Complete Carrier Assembly
9. Reverse Clutch Plate Assembly
10. 2nd Clutch Plate Assembly
11. 3rd Clutch Plate Assembly
12. Principle Free Wheel (Sprag Type)
13. Main Case
14. Extension Assembly
15. Output Shaft
16. Drive Flange
17. Speed Sensor Assembly
18. Speedo Wheel
19. Speedo Wheel Gear
20. Band Assembly
21. Planetary Carrier Assembly
22. Servo Piston
23. Selector Lever
24. Center Support
25. Main Case Valve Body Assembly
26. 4th Clutch Plate Assembly
27. Adapter Case Valve Body Assembly
28. T.C.C. Solenoid
29. Converter Pump Assembly
30. Stator
31. Turbine Assembly
32. Pressure Plate

BMW transmission Hydra-matic 4L30-E 1997 model specifications