

**Data**

Valve spring Part No.	Color coding	Outside dia. mm	Wire dia. mm	Length unloaded mm	Spring force with preloaded		
					Length mm	When new N	Limit value N
Inner spring 130 053 00 22	yellow/brown or purple/brown	22.0—22.4	2.5	45	21.5	235	224—246
Outer spring 110 053 01 20	yellow/red or purple/red	34.1—34.5	4.75	49	30.5	863	843—902

**Checking**

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In the event of repairs, check valve spring for corrosion prior to reusing.

In addition, check spring force at specified length by means of a spring test scale.

If the value is below lower limit, replace valve springs.

In the installed condition, the valve spring force of both valve springs on engine 116.96 amounts to 1147—1245 N and on the engine 117.96 1000—1245 N. In order to avoid that this value is not lower than specified on valves which have been lowered (machined valve seats), the washer, part No. 116 990 26 40, should be placed under the Rotocap.