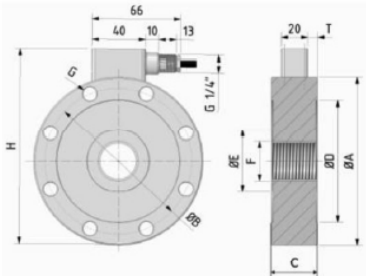
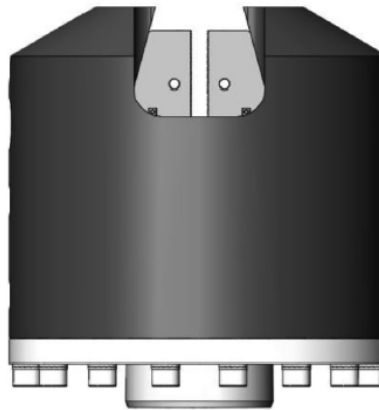
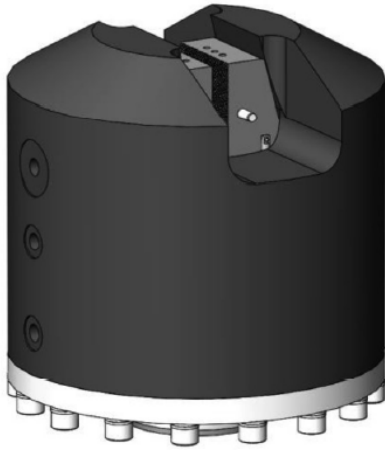


Supply Description:

ID	Description	Q.ty																																																																																																																																																																																																
1	Code: HW-AI-001 Data acquisition board for strain gauge. <ul style="list-style-type: none"> • Fast signal: available for closed control loop. • Number of channels: 1 ; Resolution: 24 bit • Input: configurable by STEP Lab in the order phase: • Full bridge (standard), half bridge or quarter bridge. • PRICE VALID FOR Q.TY 1 ON EACH MACHINE IN ADDITION TO THE STANDARD SINGLE CHANNEL LOAD CELL. FOR OTHER CHANNELS SEE OPTION BELOW. 	1																																																																																																																																																																																																
2	Code: HW-AO-001 Analog OUTPUT channels for voltage signal. <ul style="list-style-type: none"> • Number of channels: 2 ; Resolution: 16 bit • Input: ±10 V 	1																																																																																																																																																																																																
3	Code: HW-DI-001 Digital INPUT channels <ul style="list-style-type: none"> • Number of channels: 4 • Input: free dry contacts (other types on request) 	1																																																																																																																																																																																																
4	Code: HW-DO-001 Digital OUTPUT channels <ul style="list-style-type: none"> • Number of channels: 4 • Output: free dry contacts (other types on request) 	1																																																																																																																																																																																																
5	Code: LC-UA-PC-N-10 Uniaxial load cell, pancake type, 10 kN Accuracy class 1 ISO 376  <table border="1" data-bbox="686 1137 1181 1411"> <thead> <tr> <th>LOAD</th> <th>∅A</th> <th>B</th> <th>C</th> <th>∅D</th> <th>∅E</th> <th>F</th> <th>G</th> <th>n°G</th> <th>H</th> <th>T</th> <th>KHz⁽¹⁾</th> </tr> </thead> <tbody> <tr> <td>2,5 kN</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2,5</td> </tr> <tr> <td>5 kN</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2,5</td> </tr> <tr> <td>10 kN</td> <td>100</td> <td>86</td> <td>35</td> <td>72</td> <td>32</td> <td>M20x1,5</td> <td>9</td> <td>6</td> <td>121</td> <td>7,5</td> <td>2,5</td> </tr> <tr> <td>25 kN</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>4,8</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>8,6</td> </tr> <tr> <td>50 kN</td> <td>127</td> <td>110</td> <td>35</td> <td>92</td> <td>47</td> <td>M30x2</td> <td>10,5</td> <td>8</td> <td>149</td> <td>7,5</td> <td>3,8</td> </tr> <tr> <td>100 kN</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>5,8</td> </tr> <tr> <td>200 kN</td> <td></td> <td></td> <td>50</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>15</td> <td>5,7</td> </tr> <tr> <td>300 kN</td> <td>165</td> <td>138</td> <td></td> <td>108</td> <td>62</td> <td>M42x3</td> <td>17</td> <td>12</td> <td>188</td> <td></td> <td>7,3</td> </tr> <tr> <td>500 kN</td> <td></td> <td></td> <td>60</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>20</td> <td>9,8</td> </tr> <tr> <td>750 kN</td> <td>230</td> <td>185</td> <td>80</td> <td>145</td> <td>98</td> <td>M60x3</td> <td>26</td> <td>12</td> <td>254</td> <td>30</td> <td>3,2</td> </tr> <tr> <td>1 MN</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2 MN</td> <td>300</td> <td>250</td> <td>100</td> <td>198</td> <td>132</td> <td>M100x3</td> <td>25</td> <td>16</td> <td>339</td> <td>50</td> <td>2,7</td> </tr> <tr> <td>3 MN⁽²⁾</td> <td></td> <td></td> <td>120</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>60</td> <td></td> </tr> <tr> <td>5 MN⁽²⁾</td> <td>350</td> <td>294</td> <td>130</td> <td>218</td> <td>178</td> <td>M100x3</td> <td>28</td> <td>16</td> <td>389</td> <td>65</td> <td>2,8</td> </tr> </tbody> </table>	LOAD	∅A	B	C	∅D	∅E	F	G	n°G	H	T	KHz ⁽¹⁾	2,5 kN											2,5	5 kN											2,5	10 kN	100	86	35	72	32	M20x1,5	9	6	121	7,5	2,5	25 kN											4,8												8,6	50 kN	127	110	35	92	47	M30x2	10,5	8	149	7,5	3,8	100 kN											5,8	200 kN			50							15	5,7	300 kN	165	138		108	62	M42x3	17	12	188		7,3	500 kN			60							20	9,8	750 kN	230	185	80	145	98	M60x3	26	12	254	30	3,2	1 MN												2 MN	300	250	100	198	132	M100x3	25	16	339	50	2,7	3 MN ⁽²⁾			120							60		5 MN ⁽²⁾	350	294	130	218	178	M100x3	28	16	389	65	2,8	1
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6	Code: LC-ADPTR-D100-M30 Adapter plate to mount pancake load cells in series (D100 to M30x2)	1																																																																																																																																																																																																
7	Code: GR-HW-100-200 Hydraulic Wedge Grip for tension, compression and torsion Main features: <ul style="list-style-type: none"> • Maximum dynamic force: +/- 100 kN • Maximum dynamic torque: +/- 200 Nm • Compatible with climatic chamber: stainless steel construction with ionic nitriding treatment and final anti corrosion surface coating. • Wedge-action, self centering: jaws always close in the center • Oil-operated • Interchangeable jaws for rectangular and cylindrical specimens of different dimensions 	1																																																																																																																																																																																																



Dimensions may change due to continuous product improvement. Final geometry will be shared with the customer

8	<p>Code: GR-HW-100-200-SJ-XX-X Set of jaws:</p> <ul style="list-style-type: none"> • Indicated for plastic and unhardened metal specimens • Not suitable for hardened metal specimens <p>The price refers to one set (four jaws), that you can choose between the following options:</p> <ul style="list-style-type: none"> • GR-HW-100-200-SJ-XX-X: for rectangular specimens, 0-8 mm • GR-HW-100-200-SJ-XX-X: for rectangular specimens, 8-16 mm • GR-HW-100-200-SJ-XX-X: for cylindrical specimens, 6-12 mm • GR-HW-100-200-SJ-XX-X: for cylindrical specimens, 10-16 mm 	1
9	<p>Code: GR-MW-100-200-HJ-XX-X Set of hardened jaws for cylindrical specimens:</p> <ul style="list-style-type: none"> • Hardened steel construction with ionic nitriding treatment and final anti corrosion surface coating • Indicated for hardened metal specimens <p>The price refers to one set (four jaws), that you can choose between the following options:</p> <ul style="list-style-type: none"> • GR-HW-100-200-HJ-XX-X: for rectangular specimens, 0-8 mm • GR-HW-100-200-HJ-XX-X: for rectangular specimens, 8-16 mm • GR-HW-100-200-HJ-XX-X: for cylindrical specimens, 6-12 mm • GR-HW-100-200-HJ-XX-X: for cylindrical specimens, 10-16 mm 	1
10	<p>Code: GR-HU-SA Stand alone hydraulic unit for hydraulic grips</p> <ul style="list-style-type: none"> • Includes electric pump, tank, valves, hoses and all the necessary hydraulic items to power hydraulic grips • Includes all the necessary electric components to control hydraulic grips. • Handheld button panel with controls to open/close upper and lower grips • Stand alone version: manual operation by pressing the buttons, no modification needed to the existing machine 	1