

SUCO 0533 ELECTRONIC PRESSURE SWITCH

053325230B007

NPN output (Low Side), NC, 0-250 Bar, M10x1 zyl. DIN
3852-A, AMP Superseal 1.5



- One Switching Output
- Stainless Steel & Titanium Wetted Parts
- Silicon-On-Sapphire Technology
- Factory Set



PRODUCT DESCRIPTION

The SUCO 0533 electronic pressure switch is a high-performance, factory-configured device built with a robust stainless steel (AISI 303) and titanium, all-welded housing. It utilises advanced Silicon-on-Sapphire (SoS) sensor technology for exceptional accuracy ($\pm 0.5\%$ FS, resolution 0.1% FS) and long-term stability ($\pm 0.1\%$ FS/year), and is designed to withstand overpressure up to $4\times$ its rated range. Available ranges span from 0–10 bar to a massive 0–1,650 bar, with a single NPN (low-side) normally-closed transistor output capable of handling up to 0.5 A and featuring built-in protections for short circuit, reverse polarity, and overvoltage. It supports multiple pressure port threads ($G\frac{1}{4}$, $NPT\frac{1}{2}/NPT\frac{1}{4}$, UNF, M10, M14) and electrical connectors (DIN EN 175301-803-A, M12, AMP Superseal, Deutsch, 2 m cable), and it offers a fast response time (< 4 ms) and wide compensated temperature range for stable operation across -40 °C to 125 °C.

The 0533 excels in harsh mobile-hydraulic, industrial, and pneumatic environments, such as construction machinery, off-road vehicles, or process systems, where rugged build and reliable switching under dynamic pressures are essential. Its compact design and robust sensor technology make it suitable for safety interlock circuits, pressure alarms, and automated shutdown controls in PLC or relay-based systems. The device's narrow switching hysteresis and optional window function enable precise range monitoring, while the heavy-duty housing and integrated protections ensure dependable performance in conditions involving vibration, wash-down, and electrical noise, making it an ideal choice for long-term OEM applications needing precise, rugged pressure monitoring.

TECHNICAL DATA

GENERAL DATA

Adjustment range max	250 bar
Adjustment range min	0 bar
Electrical connection	AMP Superseal
Process connection	M10x1
Function	Normally Closed
Output	NPN
Burst pressure	2000 bar
Pressure max	1000 bar

TEMPERATURE & MATERIALS DATA

Temperature of media from	-40 °C
Temperature of media to	125 °C
Temperature ambient from	-40 °C
Temperature ambient to	100 °C
Material of body	Stainless steel 1.4305
Material of wetted parts	Stainless steel 1.4305, Titanium

ADDITIONAL DATA

Supply voltage dc max	32 V DC
Supply voltage dc min	9.6 V DC
Pressure rise	≤ 5,000 bar/s
Switching time	< 2 ms
Switching point adjustment range	2 ... 100 % of the nominal pressure range Full Scale (FS), programmable at factory
Weight	80 g

SAFETY & APPROVALS

IP class	IP67
Hysteresis	2..99.8% of nominal pressure range (full scale), programmable at factory
Shock resistance	500m / s ² ; 11 ms half sine wave; DIN EN 60068-2-27
Vibration resistance	20g; 4..2000 Hz sine wave, DIN EN 60068-2-6
EMC	EMC 2014/30/EU, EN 61000-6-2:2005, EN 61000-6-3:2007
Accuracy	±0.5 % of adjustment range (Full scale) at room temperature
Long term stability	±0.1 % of adjustment range (full scale) per year
Mechanical life expectancy	10,000,000 switching cycles at rise rates to 5,000 bar/s nominal pressure
Repeatability	±0.1 % full scale



Connection diagrams



Technical modifications and errors excepted.

DIN EN 17530-803-A <table> <tr><th>Pin</th><th>Assignment</th></tr> <tr><td>1</td><td>Ch+</td></tr> <tr><td>2</td><td>Ch-</td></tr> <tr><td>3</td><td>Ch0</td></tr> <tr><td>4</td><td>Ch1</td></tr> <tr><td>5</td><td>Ch2</td></tr> <tr><td>6</td><td>Ch3</td></tr> <tr><td>7</td><td>Ch4</td></tr> <tr><td>8</td><td>Ch5</td></tr> <tr><td>9</td><td>Ch6</td></tr> <tr><td>10</td><td>Ch7</td></tr> <tr><td>11</td><td>Ch8</td></tr> <tr><td>12</td><td>Ch9</td></tr> <tr><td>13</td><td>Ch10</td></tr> <tr><td>14</td><td>Ch11</td></tr> <tr><td>15</td><td>Ch12</td></tr> <tr><td>16</td><td>Ch13</td></tr> <tr><td>17</td><td>Ch14</td></tr> <tr><td>18</td><td>Ch15</td></tr> <tr><td>19</td><td>Ch16</td></tr> <tr><td>20</td><td>Ch17</td></tr> <tr><td>21</td><td>Ch18</td></tr> <tr><td>22</td><td>Ch19</td></tr> <tr><td>23</td><td>Ch20</td></tr> <tr><td>24</td><td>Ch21</td></tr> <tr><td>25</td><td>Ch22</td></tr> <tr><td>26</td><td>Ch23</td></tr> <tr><td>27</td><td>Ch24</td></tr> <tr><td>28</td><td>Ch25</td></tr> <tr><td>29</td><td>Ch26</td></tr> <tr><td>30</td><td>Ch27</td></tr> <tr><td>31</td><td>Ch28</td></tr> <tr><td>32</td><td>Ch29</td></tr> <tr><td>33</td><td>Ch30</td></tr> <tr><td>34</td><td>Ch31</td></tr> <tr><td>35</td><td>Ch32</td></tr> <tr><td>36</td><td>Ch33</td></tr> <tr><td>37</td><td>Ch34</td></tr> <tr><td>38</td><td>Ch35</td></tr> <tr><td>39</td><td>Ch36</td></tr> <tr><td>40</td><td>Ch37</td></tr> <tr><td>41</td><td>Ch38</td></tr> <tr><td>42</td><td>Ch39</td></tr> <tr><td>43</td><td>Ch40</td></tr> <tr><td>44</td><td>Ch41</td></tr> <tr><td>45</td><td>Ch42</td></tr> <tr><td>46</td><td>Ch43</td></tr> <tr><td>47</td><td>Ch44</td></tr> <tr><td>48</td><td>Ch45</td></tr> <tr><td>49</td><td>Ch46</td></tr> <tr><td>50</td><td>Ch47</td></tr> <tr><td>51</td><td>Ch48</td></tr> <tr><td>52</td><td>Ch49</td></tr> <tr><td>53</td><td>Ch50</td></tr> <tr><td>54</td><td>Ch51</td></tr> <tr><td>55</td><td>Ch52</td></tr> <tr><td>56</td><td>Ch53</td></tr> <tr><td></td><td></td></tr> </table> <p>ISO 1570-803-A</p> <p>Order number: 001</p>	Pin	Assignment	1	Ch+	2	Ch-	3	Ch0	4	Ch1	5	Ch2	6	Ch3	7	Ch4	8	Ch5	9	Ch6	10	Ch7	11	Ch8	12	Ch9	13	Ch10	14	Ch11	15	Ch12	16	Ch13	17	Ch14	18	Ch15	19	Ch16	20	Ch17	21	Ch18	22	Ch19	23	Ch20	24	Ch21	25	Ch22	26	Ch23	27	Ch24	28	Ch25	29	Ch26	30	Ch27	31	Ch28	32	Ch29	33	Ch30	34	Ch31	35	Ch32	36	Ch33	37	Ch34	38	Ch35	39	Ch36	40	Ch37	41	Ch38	42	Ch39	43	Ch40	44	Ch41	45	Ch42	46	Ch43	47	Ch44	48	Ch45	49	Ch46	50	Ch47	51	Ch48	52	Ch49	53	Ch50	54	Ch51	55	Ch52	56	Ch53			M 12 - DIN EN 61076-2-101-A <table> <tr><th>Pin</th><th>Assignment</th></tr> <tr><td>1</td><td>Ch+</td></tr> <tr><td>2</td><td>Ch-</td></tr> <tr><td>3</td><td>Ch0</td></tr> <tr><td>4</td><td>Ch1</td></tr> <tr><td>5</td><td>Ch2</td></tr> <tr><td>6</td><td>Ch3</td></tr> <tr><td>7</td><td>Ch4</td></tr> <tr><td>8</td><td>Ch5</td></tr> <tr><td>9</td><td>Ch6</td></tr> <tr><td>10</td><td>Ch7</td></tr> <tr><td>11</td><td>Ch8</td></tr> <tr><td>12</td><td>Ch9</td></tr> <tr><td>13</td><td>Ch10</td></tr> <tr><td>14</td><td>Ch11</td></tr> <tr><td>15</td><td>Ch12</td></tr> <tr><td>16</td><td>Ch13</td></tr> <tr><td>17</td><td>Ch14</td></tr> <tr><td>18</td><td>Ch15</td></tr> <tr><td>19</td><td>Ch16</td></tr> <tr><td>20</td><td>Ch17</td></tr> <tr><td>21</td><td>Ch18</td></tr> <tr><td>22</td><td>Ch19</td></tr> <tr><td>23</td><td>Ch20</td></tr> <tr><td>24</td><td>Ch21</td></tr> <tr><td>25</td><td>Ch22</td></tr> <tr><td>26</td><td>Ch23</td></tr> <tr><td>27</td><td>Ch24</td></tr> <tr><td>28</td><td>Ch25</td></tr> <tr><td>29</td><td>Ch26</td></tr> <tr><td>30</td><td>Ch27</td></tr> <tr><td>31</td><td>Ch28</td></tr> <tr><td>32</td><td>Ch29</td></tr> <tr><td>33</td><td>Ch30</td></tr> <tr><td>34</td><td>Ch31</td></tr> <tr><td>35</td><td>Ch32</td></tr> <tr><td>36</td><td>Ch33</td></tr> <tr><td>37</td><td>Ch34</td></tr> <tr><td>38</td><td>Ch35</td></tr> <tr><td>39</td><td>Ch36</td></tr> <tr><td>40</td><td>Ch37</td></tr> <tr><td>41</td><td>Ch38</td></tr> <tr><td>42</td><td>Ch39</td></tr> <tr><td>43</td><td>Ch40</td></tr> <tr><td>44</td><td>Ch41</td></tr> <tr><td>45</td><td>Ch42</td></tr> <tr><td>46</td><td>Ch43</td></tr> <tr><td>47</td><td>Ch44</td></tr> <tr><td>48</td><td>Ch45</td></tr> <tr><td>49</td><td>Ch46</td></tr> <tr><td>50</td><td>Ch47</td></tr> <tr><td>51</td><td>Ch48</td></tr> <tr><td>52</td><td>Ch49</td></tr> <tr><td>53</td><td>Ch50</td></tr> <tr><td>54</td><td>Ch51</td></tr> <tr><td>55</td><td>Ch52</td></tr> <tr><td>56</td><td>Ch53</td></tr> <tr><td></td><td></td></tr> </table> <p>ISO 1570-803-A</p> <p>Order number: 002</p>	Pin	Assignment	1	Ch+	2	Ch-	3	Ch0	4	Ch1	5	Ch2	6	Ch3	7	Ch4	8	Ch5	9	Ch6	10	Ch7	11	Ch8	12	Ch9	13	Ch10	14	Ch11	15	Ch12	16	Ch13	17	Ch14	18	Ch15	19	Ch16	20	Ch17	21	Ch18	22	Ch19	23	Ch20	24	Ch21	25	Ch22	26	Ch23	27	Ch24	28	Ch25	29	Ch26	30	Ch27	31	Ch28	32	Ch29	33	Ch30	34	Ch31	35	Ch32	36	Ch33	37	Ch34	38	Ch35	39	Ch36	40	Ch37	41	Ch38	42	Ch39	43	Ch40	44	Ch41	45	Ch42	46	Ch43	47	Ch44	48	Ch45	49	Ch46	50	Ch47	51	Ch48	52	Ch49	53	Ch50	54	Ch51	55	Ch52	56	Ch53			ISO 15710-81-A-1 <table> <tr><th>Pin</th><th>Assignment</th></tr> <tr><td>1</td><td>Ch+</td></tr> <tr><td>2</td><td>Ch-</td></tr> <tr><td>3</td><td>Ch0</td></tr> <tr><td>4</td><td>Ch1</td></tr> <tr><td>5</td><td>Ch2</td></tr> <tr><td>6</td><td>Ch3</td></tr> <tr><td>7</td><td>Ch4</td></tr> <tr><td>8</td><td>Ch5</td></tr> <tr><td>9</td><td>Ch6</td></tr> <tr><td>10</td><td>Ch7</td></tr> <tr><td>11</td><td>Ch8</td></tr> <tr><td>12</td><td>Ch9</td></tr> <tr><td>13</td><td>Ch10</td></tr> <tr><td>14</td><td>Ch11</td></tr> <tr><td>15</td><td>Ch12</td></tr> <tr><td>16</td><td>Ch13</td></tr> <tr><td>17</td><td>Ch14</td></tr> <tr><td>18</td><td>Ch15</td></tr> <tr><td>19</td><td>Ch16</td></tr> <tr><td>20</td><td>Ch17</td></tr> <tr><td>21</td><td>Ch18</td></tr> <tr><td>22</td><td>Ch19</td></tr> <tr><td>23</td><td>Ch20</td></tr> <tr><td>24</td><td>Ch21</td></tr> <tr><td>25</td><td>Ch22</td></tr> <tr><td>26</td><td>Ch23</td></tr> <tr><td>27</td><td>Ch24</td></tr> <tr><td>28</td><td>Ch25</td></tr> <tr><td>29</td><td>Ch26</td></tr> <tr><td>30</td><td>Ch27</td></tr> <tr><td>31</td><td>Ch28</td></tr> <tr><td>32</td><td>Ch29</td></tr> <tr><td>33</td><td>Ch30</td></tr> <tr><td>34</td><td>Ch31</td></tr> <tr><td>35</td><td>Ch32</td></tr> <tr><td>36</td><td>Ch33</td></tr> <tr><td>37</td><td>Ch34</td></tr> <tr><td>38</td><td>Ch35</td></tr> <tr><td>39</td><td>Ch36</td></tr> <tr><td>40</td><td>Ch37</td></tr> <tr><td>41</td><td>Ch38</td></tr> <tr><td>42</td><td>Ch39</td></tr> <tr><td>43</td><td>Ch40</td></tr> <tr><td>44</td><td>Ch41</td></tr> <tr><td>45</td><td>Ch42</td></tr> <tr><td>46</td><td>Ch43</td></tr> <tr><td>47</td><td>Ch44</td></tr> <tr><td>48</td><td>Ch45</td></tr> <tr><td>49</td><td>Ch46</td></tr> <tr><td>50</td><td>Ch47</td></tr> <tr><td>51</td><td>Ch48</td></tr> <tr><td>52</td><td>Ch49</td></tr> <tr><td>53</td><td>Ch50</td></tr> <tr><td>54</td><td>Ch51</td></tr> <tr><td>55</td><td>Ch52</td></tr> <tr><td>56</td><td>Ch53</td></tr> <tr><td></td><td></td></tr> </table> <p>ISO 15710-81-A-1</p> <p>Order number: 003</p>	Pin	Assignment	1	Ch+	2	Ch-	3	Ch0	4	Ch1	5	Ch2	6	Ch3	7	Ch4	8	Ch5	9	Ch6	10	Ch7	11	Ch8	12	Ch9	13	Ch10	14	Ch11	15	Ch12	16	Ch13	17	Ch14	18	Ch15	19	Ch16	20	Ch17	21	Ch18	22	Ch19	23	Ch20	24	Ch21	25	Ch22	26	Ch23	27	Ch24	28	Ch25	29	Ch26	30	Ch27	31	Ch28	32	Ch29	33	Ch30	34	Ch31	35	Ch32	36	Ch33	37	Ch34	38	Ch35	39	Ch36	40	Ch37	41	Ch38	42	Ch39	43	Ch40	44	Ch41	45	Ch42	46	Ch43	47	Ch44	48	Ch45	49	Ch46	50	Ch47	51	Ch48	52	Ch49	53	Ch50	54	Ch51	55	Ch52	56	Ch53			AMP Superseal <table> <tr><th>Pin</th><th>Assignment</th></tr> <tr><td>1</td><td>Ch+</td></tr> <tr><td>2</td><td>Ch-</td></tr> <tr><td>3</td><td>Ch0</td></tr> <tr><td>4</td><td>Ch1</td></tr> <tr><td>5</td><td>Ch2</td></tr> <tr><td>6</td><td>Ch3</td></tr> <tr><td>7</td><td>Ch4</td></tr> <tr><td>8</td><td>Ch5</td></tr> <tr><td>9</td><td>Ch6</td></tr> <tr><td>10</td><td>Ch7</td></tr> <tr><td>11</td><td>Ch8</td></tr> <tr><td>12</td><td>Ch9</td></tr> <tr><td>13</td><td>Ch10</td></tr> <tr><td>14</td><td>Ch11</td></tr> <tr><td>15</td><td>Ch12</td></tr> <tr><td>16</td><td>Ch13</td></tr> <tr><td>17</td><td>Ch14</td></tr> <tr><td>18</td><td>Ch15</td></tr> <tr><td>19</td><td>Ch16</td></tr> <tr><td>20</td><td>Ch17</td></tr> <tr><td>21</td><td>Ch18</td></tr> <tr><td>22</td><td>Ch19</td></tr> <tr><td>23</td><td>Ch20</td></tr> <tr><td>24</td><td>Ch21</td></tr> <tr><td>25</td><td>Ch22</td></tr> <tr><td>26</td><td>Ch23</td></tr> <tr><td>27</td><td>Ch24</td></tr> <tr><td>28</td><td>Ch25</td></tr> <tr><td>29</td><td>Ch26</td></tr> <tr><td>30</td><td>Ch27</td></tr> <tr><td>31</td><td>Ch28</td></tr> <tr><td>32</td><td>Ch29</td></tr> <tr><td>33</td><td>Ch30</td></tr> <tr><td>34</td><td>Ch31</td></tr> <tr><td>35</td><td>Ch32</td></tr> <tr><td>36</td><td>Ch33</td></tr> <tr><td>37</td><td>Ch34</td></tr> <tr><td>38</td><td>Ch35</td></tr> <tr><td>39</td><td>Ch36</td></tr> <tr><td>40</td><td>Ch37</td></tr> <tr><td>41</td><td>Ch38</td></tr> <tr><td>42</td><td>Ch39</td></tr> <tr><td>43</td><td>Ch40</td></tr> <tr><td>44</td><td>Ch41</td></tr> <tr><td>45</td><td>Ch42</td></tr> <tr><td>46</td><td>Ch43</td></tr> <tr><td>47</td><td>Ch44</td></tr> <tr><td>48</td><td>Ch45</td></tr> <tr><td>49</td><td>Ch46</td></tr> <tr><td>50</td><td>Ch47</td></tr> <tr><td>51</td><td>Ch48</td></tr> <tr><td>52</td><td>Ch49</td></tr> <tr><td>53</td><td>Ch50</td></tr> <tr><td>54</td><td>Ch51</td></tr> <tr><td>55</td><td>Ch52</td></tr> <tr><td>56</td><td>Ch53</td></tr> <tr><td></td><td></td></tr> </table> <p>ISO 15710-81-A-1</p> <p>Order number: 004</p>	Pin	Assignment	1	Ch+	2	Ch-	3	Ch0	4	Ch1	5	Ch2	6	Ch3	7	Ch4	8	Ch5	9	Ch6	10	Ch7	11	Ch8	12	Ch9	13	Ch10	14	Ch11	15	Ch12	16	Ch13	17	Ch14	18	Ch15	19	Ch16	20	Ch17	21	Ch18	22	Ch19	23	Ch20	24	Ch21	25	Ch22	26	Ch23	27	Ch24	28	Ch25	29	Ch26	30	Ch27	31	Ch28	32	Ch29	33	Ch30	34	Ch31	35	Ch32	36	Ch33	37	Ch34	38	Ch35	39	Ch36	40	Ch37	41	Ch38	42	Ch39	43	Ch40	44	Ch41	45	Ch42	46	Ch43	47	Ch44	48	Ch45	49	Ch46	50	Ch47	51	Ch48	52	Ch49	53	Ch50	54	Ch51	55	Ch52	56	Ch53		
Pin	Assignment																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
1	Ch+																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
2	Ch-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
3	Ch0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
4	Ch1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
5	Ch2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
6	Ch3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
7	Ch4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
8	Ch5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
9	Ch6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
10	Ch7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
11	Ch8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
12	Ch9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
13	Ch10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
14	Ch11																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
15	Ch12																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
16	Ch13																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
17	Ch14																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
18	Ch15																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
19	Ch16																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
20	Ch17																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
21	Ch18																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
22	Ch19																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
23	Ch20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
24	Ch21																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
25	Ch22																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
26	Ch23																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
27	Ch24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
28	Ch25																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
29	Ch26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
30	Ch27																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
31	Ch28																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
32	Ch29																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
33	Ch30																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
34	Ch31																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
35	Ch32																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
36	Ch33																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
37	Ch34																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
38	Ch35																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
39	Ch36																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
40	Ch37																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
41	Ch38																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
42	Ch39																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
43	Ch40																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
44	Ch41																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
45	Ch42																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
46	Ch43																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
47	Ch44																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
48	Ch45																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
49	Ch46																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
50	Ch47																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
51	Ch48																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
52	Ch49																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
53	Ch50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
54	Ch51																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
55	Ch52																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
56	Ch53																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Pin	Assignment																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
1	Ch+																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
2	Ch-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
3	Ch0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
4	Ch1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
5	Ch2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
6	Ch3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
7	Ch4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
8	Ch5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
9	Ch6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
10	Ch7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
11	Ch8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
12	Ch9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
13	Ch10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
14	Ch11																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
15	Ch12																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
16	Ch13																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
17	Ch14																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
18	Ch15																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
19	Ch16																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
20	Ch17																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
21	Ch18																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
22	Ch19																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
23	Ch20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
24	Ch21																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
25	Ch22																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
26	Ch23																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
27	Ch24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
28	Ch25																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
29	Ch26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
30	Ch27																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
31	Ch28																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
32	Ch29																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
33	Ch30																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
34	Ch31																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
35	Ch32																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
36	Ch33																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
37	Ch34																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
38	Ch35																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
39	Ch36																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
40	Ch37																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
41	Ch38																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
42	Ch39																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
43	Ch40																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
44	Ch41																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
45	Ch42																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
46	Ch43																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
47	Ch44																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
48	Ch45																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
49	Ch46																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
50	Ch47																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
51	Ch48																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
52	Ch49																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
53	Ch50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
54	Ch51																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
55	Ch52																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
56	Ch53																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Pin	Assignment																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
1	Ch+																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
2	Ch-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
3	Ch0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
4	Ch1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
5	Ch2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
6	Ch3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
7	Ch4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
8	Ch5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
9	Ch6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
10	Ch7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
11	Ch8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
12	Ch9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
13	Ch10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
14	Ch11																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
15	Ch12																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
16	Ch13																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
17	Ch14																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
18	Ch15																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
19	Ch16																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
20	Ch17																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
21	Ch18																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
22	Ch19																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
23	Ch20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
24	Ch21																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
25	Ch22																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
26	Ch23																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
27	Ch24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
28	Ch25																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
29	Ch26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
30	Ch27																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
31	Ch28																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
32	Ch29																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
33	Ch30																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
34	Ch31																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
35	Ch32																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
36	Ch33																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
37	Ch34																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
38	Ch35																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
39	Ch36																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
40	Ch37																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
41	Ch38																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
42	Ch39																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
43	Ch40																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
44	Ch41																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
45	Ch42																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
46	Ch43																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
47	Ch44																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
48	Ch45																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
49	Ch46																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
50	Ch47																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
51	Ch48																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
52	Ch49																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
53	Ch50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
54	Ch51																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
55	Ch52																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
56	Ch53																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Pin	Assignment																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
1	Ch+																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
2	Ch-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
3	Ch0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
4	Ch1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
5	Ch2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
6	Ch3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
7	Ch4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
8	Ch5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
9	Ch6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
10	Ch7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
11	Ch8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
12	Ch9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
13	Ch10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
14	Ch11																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
15	Ch12																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
16	Ch13																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
17	Ch14																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
18	Ch15																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
19	Ch16																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
20	Ch17																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
21	Ch18																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
22	Ch19																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
23	Ch20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
24	Ch21																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
25	Ch22																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
26	Ch23																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
27	Ch24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
28	Ch25																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
29	Ch26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
30	Ch27																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
31	Ch28																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
32	Ch29																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
33	Ch30																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
34	Ch31																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
35	Ch32																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
36	Ch33																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
37	Ch34																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
38	Ch35																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
39	Ch36																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
40	Ch37																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
41	Ch38																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
42	Ch39																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
43	Ch40																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
44	Ch41																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
45	Ch42																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
46	Ch43																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
47	Ch44																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
48	Ch45																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
49	Ch46																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
50	Ch47																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
51	Ch48																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
52	Ch49																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
53	Ch50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
54	Ch51																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
55	Ch52																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
56	Ch53																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
DIN EN 17530-40 <table> <tr><th>Pin</th><th>Assignment</th></tr> <tr><td>1</td><td>Ch+</td></tr> <tr><td>2</td><td>Ch-</td></tr> <tr><td>3</td><td>Ch0</td></tr> <tr><td>4</td><td>Ch1</td></tr> <tr><td>5</td><td>Ch2</td></tr> <tr><td>6</td><td>Ch3</td></tr> <tr><td>7</td><td>Ch4</td></tr> <tr><td>8</td><td>Ch5</td></tr> <tr><td>9</td><td>Ch6</td></tr> <tr><td>10</td><td>Ch7</td></tr> <tr><td>11</td><td>Ch8</td></tr> <tr><td>12</td><td>Ch9</td></tr> <tr><td>13</td><td>Ch10</td></tr> <tr><td>14</td><td>Ch11</td></tr> <tr><td>15</td><td>Ch12</td></tr> <tr><td>16</td><td>Ch13</td></tr> <tr><td>17</td><td>Ch14</td></tr> <tr><td>18</td><td>Ch15</td></tr> <tr><td>19</td><td>Ch16</td></tr> <tr><td>20</td><td>Ch17</td></tr> <tr><td>21</td><td>Ch18</td></tr> <tr><td>22</td><td>Ch19</td></tr> <tr><td>23</td><td>Ch20</td></tr> <tr><td>24</td><td>Ch21</td></tr> <tr><td>25</td><td>Ch22</td></tr> <tr><td>26</td><td>Ch23</td></tr> <tr><td>27</td><td>Ch24</td></tr> <tr><td>28</td><td>Ch25</td></tr> <tr><td>29</td><td>Ch26</td></tr> <tr><td>30</td><td>Ch27</td></tr> <tr><td>31</td><td>Ch28</td></tr> <tr><td>32</td><td>Ch29</td></tr> <tr><td>33</td><td>Ch30</td></tr> <tr><td>34</td><td>Ch31</td></tr> <tr><td>35</td><td>Ch32</td></tr> <tr><td>36</td><td>Ch33</td></tr> <tr><td>37</td><td>Ch34</td></tr> <tr><td>38</td><td>Ch35</td></tr> <tr><td>39</td><td>Ch36</td></tr> <tr><td>40</td><td>Ch37</td></tr> <tr><td>41</td><td>Ch38</td></tr> <tr><td>42</td><td>Ch39</td></tr> <tr><td>43</td><td>Ch40</td></tr> <tr><td>44</td><td>Ch41</td></tr> <tr><td>45</td><td>Ch42</td></tr> <tr><td>46</td><td>Ch43</td></tr> <tr><td>47</td><td>Ch44</td></tr> <tr><td>48</td><td>Ch45</td></tr> <tr><td>49</td><td>Ch46</td></tr> <tr><td>50</td><td>Ch47</td></tr> <tr><td>51</td><td>Ch48</td></tr> <tr><td>52</td><td>Ch49</td></tr> <tr><td>53</td><td>Ch50</td></tr> <tr><td>54</td><td>Ch51</td></tr> <tr><td>55</td><td>Ch52</td></tr> <tr><td>56</td><td>Ch53</td></tr> <tr><td></td><td></td></tr> </table> <p>ISO 15710-40</p> <p>Order number: 005</p>	Pin	Assignment	1	Ch+	2	Ch-	3	Ch0	4	Ch1	5	Ch2	6	Ch3	7	Ch4	8	Ch5	9	Ch6	10	Ch7	11	Ch8	12	Ch9	13	Ch10	14	Ch11	15	Ch12	16	Ch13	17	Ch14	18	Ch15	19	Ch16	20	Ch17	21	Ch18	22	Ch19	23	Ch20	24	Ch21	25	Ch22	26	Ch23	27	Ch24	28	Ch25	29	Ch26	30	Ch27	31	Ch28	32	Ch29	33	Ch30	34	Ch31	35	Ch32	36	Ch33	37	Ch34	38	Ch35	39	Ch36	40	Ch37	41	Ch38	42	Ch39	43	Ch40	44	Ch41	45	Ch42	46	Ch43	47	Ch44	48	Ch45	49	Ch46	50	Ch47	51	Ch48	52	Ch49	53	Ch50	54	Ch51	55	Ch52	56	Ch53			DIN EN 17530-40 <table> <tr><th>Pin</th><th>Assignment</th></tr> <tr><td>1</td><td>Ch+</td></tr> <tr><td>2</td><td>Ch-</td></tr> <tr><td>3</td><td>Ch0</td></tr> <tr><td>4</td><td>Ch1</td></tr> <tr><td>5</td><td>Ch2</td></tr> <tr><td>6</td><td>Ch3</td></tr> <tr><td>7</td><td>Ch4</td></tr> <tr><td>8</td><td>Ch5</td></tr> <tr><td>9</td><td>Ch6</td></tr> <tr><td>10</td><td>Ch7</td></tr> <tr><td>11</td><td>Ch8</td></tr> <tr><td>12</td><td>Ch9</td></tr> <tr><td>13</td><td>Ch10</td></tr> <tr><td>14</td><td>Ch11</td></tr> <tr><td>15</td><td>Ch12</td></tr> <tr><td>16</td><td>Ch13</td></tr> <tr><td>17</td><td>Ch14</td></tr> <tr><td>18</td><td>Ch15</td></tr> <tr><td>19</td><td>Ch16</td></tr> <tr><td>20</td><td>Ch17</td></tr> <tr><td>21</td><td>Ch18</td></tr> <tr><td>22</td><td>Ch19</td></tr> <tr><td>23</td><td>Ch20</td></tr> <tr><td>24</td><td>Ch21</td></tr> <tr><td>25</td><td>Ch22</td></tr> <tr><td>26</td><td>Ch23</td></tr> <tr><td>27</td><td>Ch24</td></tr> <tr><td>28</td><td>Ch25</td></tr> <tr><td>29</td><td>Ch26</td></tr> <tr><td>30</td><td>Ch27</td></tr> <tr><td>31</td><td>Ch28</td></tr> <tr><td>32</td><td>Ch29</td></tr> <tr><td>33</td><td>Ch30</td></tr> <tr><td>34</td><td>Ch31</td></tr> <tr><td>35</td><td>Ch32</td></tr> <tr><td>36</td><td>Ch33</td></tr> <tr><td>37</td><td>Ch34</td></tr> <tr><td>38</td><td>Ch35</td></tr> <tr><td>39</td><td>Ch36</td></tr> <tr><td>40</td><td>Ch37</td></tr> <tr><td>41</td><td>Ch38</td></tr> <tr><td>42</td><td>Ch39</td></tr> <tr><td>43</td><td>Ch40</td></tr> <tr><td>44</td><td>Ch41</td></tr> <tr><td>45</td><td>Ch42</td></tr> <tr><td>46</td><td>Ch43</td></tr> <tr><td>47</td><td>Ch44</td></tr> <tr><td>48</td><td>Ch45</td></tr> <tr><td>49</td><td>Ch46</td></tr> <tr><td>50</td><td>Ch47</td></tr> <tr><td>51</td><td>Ch48</td></tr> <tr><td>52</td><td>Ch49</td></tr> <tr><td>53</td><td>Ch50</td></tr> <tr><td>54</td><td>Ch51</td></tr> <tr><td>55</td><td>Ch52</td></tr> <tr><td>56</td><td>Ch53</td></tr> <tr><td></td><td></td></tr> </table> <p>ISO 15710-40</p> <p>Order number: 006</p>	Pin	Assignment	1	Ch+	2	Ch-	3	Ch0	4	Ch1	5	Ch2	6	Ch3	7	Ch4	8	Ch5	9	Ch6	10	Ch7	11	Ch8	12	Ch9	13	Ch10	14	Ch11	15	Ch12	16	Ch13	17	Ch14	18	Ch15	19	Ch16	20	Ch17	21	Ch18	22	Ch19	23	Ch20	24	Ch21	25	Ch22	26	Ch23	27	Ch24	28	Ch25	29	Ch26	30	Ch27	31	Ch28	32	Ch29	33	Ch30	34	Ch31	35	Ch32	36	Ch33	37	Ch34	38	Ch35	39	Ch36	40	Ch37	41	Ch38	42	Ch39	43	Ch40	44	Ch41	45	Ch42	46	Ch43	47	Ch44	48	Ch45	49	Ch46	50	Ch47	51	Ch48	52	Ch49	53	Ch50	54	Ch51	55	Ch52	56	Ch53			Cable connection <table> <tr><th>Pin</th><th>Assignment</th></tr> <tr><td>1</td><td>Ch+</td></tr> <tr><td>2</td><td>Ch-</td></tr> <tr><td>3</td><td>Ch0</td></tr> <tr><td>4</td><td>Ch1</td></tr> <tr><td>5</td><td>Ch2</td></tr> <tr><td>6</td><td>Ch3</td></tr> <tr><td>7</td><td>Ch4</td></tr> <tr><td>8</td><td>Ch5</td></tr> <tr><td>9</td><td>Ch6</td></tr> <tr><td>10</td><td>Ch7</td></tr> <tr><td>11</td><td>Ch8</td></tr> <tr><td>12</td><td>Ch9</td></tr> <tr><td>13</td><td>Ch10</td></tr> <tr><td>14</td><td>Ch11</td></tr> <tr><td>15</td><td>Ch12</td></tr> <tr><td>16</td><td>Ch13</td></tr> <tr><td>17</td><td>Ch14</td></tr> <tr><td>18</td><td>Ch15</td></tr> <tr><td>19</td><td>Ch16</td></tr> <tr><td>20</td><td>Ch17</td></tr> <tr><td>21</td><td>Ch18</td></tr> <tr><td>22</td><td>Ch19</td></tr> <tr><td>23</td><td>Ch20</td></tr> <tr><td>24</td><td>Ch21</td></tr> <tr><td>25</td><td>Ch22</td></tr> <tr><td>26</td><td>Ch23</td></tr> <tr><td>27</td><td>Ch24</td></tr> <tr><td>28</td><td>Ch25</td></tr> <tr><td>29</td><td>Ch26</td></tr> <tr><td>30</td><td>Ch27</td></tr> <tr><td>31</td><td>Ch28</td></tr> <tr><td>32</td><td>Ch29</td></tr> <tr><td>33</td><td>Ch30</td></tr> <tr><td>34</td><td>Ch31</td></tr> <tr><td>35</td><td>Ch32</td></tr> <tr><td>36</td><td>Ch33</td></tr> <tr><td>37</td><td>Ch34</td></tr> <tr><td>38</td><td>Ch35</td></tr> <tr><td>39</td><td>Ch36</td></tr> <tr><td>40</td><td>Ch37</td></tr> <tr><td>41</td><td>Ch38</td></tr> <tr><td>42</td><td>Ch39</td></tr> <tr><td>43</td><td>Ch40</td></tr> <tr><td>44</td><td>Ch41</td></tr> <tr><td>45</td><td>Ch42</td></tr> <tr><td>46</td><td>Ch43</td></tr> <tr><td>47</td><td>Ch44</td></tr> <tr><td>48</td><td>Ch45</td></tr> <tr><td>49</td><td>Ch46</td></tr> <tr><td>50</td><td>Ch47</td></tr> <tr><td>51</td><td>Ch48</td></tr> <tr><td>52</td><td>Ch49</td></tr> <tr><td>53</td><td>Ch50</td></tr> <tr><td>54</td><td>Ch51</td></tr> <tr><td>55</td><td>Ch52</td></tr> <tr><td>56</td><td>Ch53</td></tr> <tr><td></td><td></td></tr> </table> <p>ISO 15710-40</p> <p>Order number: 007</p>	Pin	Assignment	1	Ch+	2	Ch-	3	Ch0	4	Ch1	5	Ch2	6	Ch3	7	Ch4	8	Ch5	9	Ch6	10	Ch7	11	Ch8	12	Ch9	13	Ch10	14	Ch11	15	Ch12	16	Ch13	17	Ch14	18	Ch15	19	Ch16	20	Ch17	21	Ch18	22	Ch19	23	Ch20	24	Ch21	25	Ch22	26	Ch23	27	Ch24	28	Ch25	29	Ch26	30	Ch27	31	Ch28	32	Ch29	33	Ch30	34	Ch31	35	Ch32	36	Ch33	37	Ch34	38	Ch35	39	Ch36	40	Ch37	41	Ch38	42	Ch39	43	Ch40	44	Ch41	45	Ch42	46	Ch43	47	Ch44	48	Ch45	49	Ch46	50	Ch47	51	Ch48	52	Ch49	53	Ch50	54	Ch51	55	Ch52	56	Ch53																																																																																																																							
Pin	Assignment																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
1	Ch+																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
2	Ch-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
3	Ch0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
4	Ch1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
5	Ch2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
6	Ch3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
7	Ch4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
8	Ch5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
9	Ch6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
10	Ch7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
11	Ch8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
12	Ch9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
13	Ch10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
14	Ch11																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
15	Ch12																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
16	Ch13																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
17	Ch14																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
18	Ch15																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
19	Ch16																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
20	Ch17																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
21	Ch18																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
22	Ch19																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
23	Ch20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
24	Ch21																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
25	Ch22																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
26	Ch23																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
27	Ch24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
28	Ch25																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
29	Ch26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
30	Ch27																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
31	Ch28																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
32	Ch29																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
33	Ch30																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
34	Ch31																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
35	Ch32																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
36	Ch33																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
37	Ch34																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
38	Ch35																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
39	Ch36																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
40	Ch37																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
41	Ch38																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
42	Ch39																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
43	Ch40																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
44	Ch41																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
45	Ch42																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
46	Ch43																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
47	Ch44																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
48	Ch45																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
49	Ch46																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
50	Ch47																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
51	Ch48																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
52	Ch49																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
53	Ch50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
54	Ch51																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
55	Ch52																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
56	Ch53																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Pin	Assignment																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
1	Ch+																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
2	Ch-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
3	Ch0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
4	Ch1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
5	Ch2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
6	Ch3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
7	Ch4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
8	Ch5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
9	Ch6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
10	Ch7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
11	Ch8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
12	Ch9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
13	Ch10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
14	Ch11																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
15	Ch12																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
16	Ch13																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
17	Ch14																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
18	Ch15																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
19	Ch16																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
20	Ch17																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
21	Ch18																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
22	Ch19																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
23	Ch20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
24	Ch21																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
25	Ch22																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
26	Ch23																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
27	Ch24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
28	Ch25																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
29	Ch26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
30	Ch27																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
31	Ch28																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
32	Ch29																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
33	Ch30																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
34	Ch31																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
35	Ch32																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
36	Ch33																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
37	Ch34																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
38	Ch35																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
39	Ch36																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
40	Ch37																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
41	Ch38																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
42	Ch39																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
43	Ch40																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
44	Ch41																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
45	Ch42																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
46	Ch43																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
47	Ch44																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
48	Ch45																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
49	Ch46																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
50	Ch47																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
51	Ch48																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
52	Ch49																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
53	Ch50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
54	Ch51																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
55	Ch52																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
56	Ch53																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
Pin	Assignment																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
1	Ch+																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
2	Ch-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
3	Ch0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
4	Ch1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
5	Ch2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
6	Ch3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
7	Ch4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
8	Ch5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
9	Ch6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
10	Ch7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
11	Ch8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
12	Ch9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
13	Ch10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
14	Ch11																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
15	Ch12																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
16	Ch13																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
17	Ch14																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
18	Ch15																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
19	Ch16																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
20	Ch17																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
21	Ch18																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
22	Ch19																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
23	Ch20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
24	Ch21																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
25	Ch22																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
26	Ch23																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
27	Ch24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
28	Ch25																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
29	Ch26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
30	Ch27																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
31	Ch28																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
32	Ch29																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
33	Ch30																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
34	Ch31																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
35	Ch32																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
36	Ch33																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
37	Ch34																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
38	Ch35																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
39	Ch36																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
40	Ch37																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
41	Ch38																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
42	Ch39																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
43	Ch40																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
44	Ch41																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
45	Ch42																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
46	Ch43																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
47	Ch44																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
48	Ch45																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
49	Ch46																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
50	Ch47																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
51	Ch48																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
52	Ch49																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
53	Ch50																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
54	Ch51																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
55	Ch52																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
56	Ch53																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
DIN EN 17530-40 <table> <tr><th>Pin</th><th>Assignment</th></tr> <tr><td>1</td><td>Ch+</td></tr> <tr><td>2</td><td>Ch-</td></tr> <tr><td>3</td><td>Ch0</td></tr> <tr><td>4</td><td>Ch1</td></tr> <tr><td>5</td><td>Ch2</td></tr> <tr><td>6</td><td>Ch3</td></tr> <tr><td>7</td><td>Ch4</td></tr> <tr><td>8</td><td>Ch5</td></tr> <tr><td>9</td><td>Ch6</td></tr> <tr><td>10</td><td>Ch7</td></tr> <tr><td>11</td><td>Ch8</td></tr> <tr><td>12</td><td>Ch9</td></tr> <tr><td>13</td><td>Ch10</td></tr> <tr><td>14</td><td>Ch11</td></tr> <tr><td>15</td><td>Ch12</td></tr> <tr><td>16</td><td>Ch13</td></tr> <tr><td>17</td><td>Ch14</td></tr> <tr><td>18</td><td>Ch15</td></tr> <tr><td>19</td><td>Ch16</td></tr> <tr><td>20</td><td>Ch17</td></tr> <tr><td>21</td><td>Ch18</td></tr> <tr><td>22</td><td>Ch19</td></tr> <tr><td>23</td><td>Ch20</td></tr> <tr><td>24</td><td>Ch21</td></tr> <tr><td>25</td><td>Ch22</td></tr> <tr><td>26</td><td>Ch23</td></tr> <tr><td>27</td><td>Ch24</td></tr> <tr><td>28</td><td>Ch25</td></tr> <tr><td>29</td><td>Ch26</td></tr> <tr><td>30</td><td>Ch27</td></tr> <tr><td>31</td><td>Ch28</td></tr> <tr><td>32</td><td>Ch29</td></tr> <tr><td>33</td><td>Ch30</td></tr> <tr><td>34</td><td>Ch31</td></tr> <tr><td>35</td><td>Ch32</td></tr> <tr><td>36</td><td>Ch33</td></tr> <tr><td>37</td><td>Ch34</td></tr> <tr><td>38</td><td>Ch35</td></tr> <tr><td>39</td><td>Ch36</td></tr> <tr><td>40</td><td>Ch37</td></tr> <tr><td>41</td><td>Ch38</td></tr> <tr><td>42</td><td>Ch39</td></tr> <tr><td>43</td><td>Ch40</td></tr> <tr><td>44</td><td>Ch41</td></tr> <tr><td>45</td><td>Ch42</td></tr> <tr><td>46</td><td>Ch43</td></tr> <tr><td>47</td><td>Ch44</td></tr> <tr><td>48</td><td>Ch45</td></tr> <tr><td>49</td><td>Ch46</td></tr> <tr><td>50</td><td>Ch47</td></tr> <tr><td>51</td><td>Ch48</td></tr> <tr><td>52</td><td>Ch49</td></tr> <tr><td>53</td><</tr></table>	Pin	Assignment	1	Ch+	2	Ch-	3	Ch0	4	Ch1	5	Ch2	6	Ch3	7	Ch4	8	Ch5	9	Ch6	10	Ch7	11	Ch8	12	Ch9	13	Ch10	14	Ch11	15	Ch12	16	Ch13	17	Ch14	18	Ch15	19	Ch16	20	Ch17	21	Ch18	22	Ch19	23	Ch20	24	Ch21	25	Ch22	26	Ch23	27	Ch24	28	Ch25	29	Ch26	30	Ch27	31	Ch28	32	Ch29	33	Ch30	34	Ch31	35	Ch32	36	Ch33	37	Ch34	38	Ch35	39	Ch36	40	Ch37	41	Ch38	42	Ch39	43	Ch40	44	Ch41	45	Ch42	46	Ch43	47	Ch44	48	Ch45	49	Ch46	50	Ch47	51	Ch48	52	Ch49	53																																																																																																																																																																																																																																																																																																																																																																								
Pin	Assignment																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
1	Ch+																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
2	Ch-																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
3	Ch0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
4	Ch1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
5	Ch2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
6	Ch3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
7	Ch4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
8	Ch5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
9	Ch6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
10	Ch7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
11	Ch8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
12	Ch9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
13	Ch10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
14	Ch11																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
15	Ch12																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
16	Ch13																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
17	Ch14																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
18	Ch15																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
19	Ch16																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
20	Ch17																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
21	Ch18																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
22	Ch19																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
23	Ch20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
24	Ch21																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
25	Ch22																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
26	Ch23																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
27	Ch24																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
28	Ch25																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
29	Ch26																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
30	Ch27																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
31	Ch28																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
32	Ch29																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
33	Ch30																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
34	Ch31																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
35	Ch32																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
36	Ch33																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
37	Ch34																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
38	Ch35																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
39	Ch36																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
40	Ch37																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
41	Ch38																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
42	Ch39																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
43	Ch40																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
44	Ch41																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
45	Ch42																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
46	Ch43																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
47	Ch44																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
48	Ch45																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
49	Ch46																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
50	Ch47																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
51	Ch48																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
52	Ch49																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
53																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			