

# Hydraulic and pneumatic seals



Product range

**HOLM**  
SEALING SOLUTIONS









# HOLM SEALING SOLUTIONS

## YOUR BUSINESS PARTNER FOR QUALITY SEALS



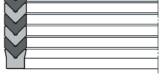





Holm Sealing Solutions in Suzhou is a subsidiary of Carsten Holm A/S, Denmark – a family-owned company founded in 1979 by its present CEO and president, Carsten Holm. Holm Sealing Solutions offers a huge variety of high quality gaskets and seals to world leading companies in a multitude of industries.

In close cooperation with our parent company in Denmark, Holm Sealing Solutions develops, produces and markets standard and custom-made gaskets and seals.

Over the years we have built up comprehensive expertise, which we are pleased to convert into long-term solutions for our customers. Commitment, know-how, experience, flexibility and, above all, fast delivery are keywords that make Holm Sealing Solutions an attractive business partner. We develop constantly to meet our customers' needs.

Type	Material	Profile	Rod	Piston	Standard hardness Shore A	Pressure bar	Temperature (max) °C	Sliding speed (max) -m/sec
<b>Hydraulic piston-rod sealing elements</b>								
<b>CH21</b> PISTON ROD SEAL	· NBR · PU · FKM*		●	●	90 92 80	150 400 -	-30°C +105°C -45°C +100°C -15°C +200°C*	≤0.5
<b>CH36</b> PISTON ROD SEAL	· NBR · FABRIC NBR · FKM*		●	●	80 80 80	250	-30°C +105°C -15°C +200°C*	≤0.5
<b>CH95</b> PISTON ROD SEAL	· NBR · FKM*		●	●	90 80	150 -	-30°C +105°C -15°C +200°C*	≤0.5
<b>CH98</b> PISTON ROD SEAL	· PU · NBR		●	●	94 70	400	-30°C +100°C	≤0.5
<b>CH114</b> PISTON ROD SEAL	· PU · NBR		●	●	94 70	400	-30°C +100°C	0.5
<b>CHX</b> X-RING	· NBR · FKM*		●	●	70 70	50 50	-30°C +105°C -15°C +200°C*	≤0.5

## Hydraulic rod sealing elements

<b>CHFR</b> LOW FRICTION ROD SEAL	· PU		●		94	400	-35°C +110°C	0.5
<b>CHXT</b> EXTRUSION RESISTANT ROD SEAL	· PU		●		94	400	-35°C +110°C	0.5
<b>CH01</b> ROD PACKING	· NBR · POM · FABRIC NBR* · FKM*		●		90 80*** 82 80	400	-30°C +105°C -15°C +200°C*	≤0.5
<b>CH22</b> ROD SEAL	· NBR · PU · FKM*		●		90 92 80	150 400 -	-30°C +105°C -40°C +100°C -15°C +200°C*	≤0.5
<b>CH29</b> BUFFER SEAL	· PU · POM BACK-UP RING		●		92 80***	400	-30°C +100°C	≤0.5
<b>CH31</b> HEAVY DUTY SEAL	· PU · NBR RING · POM BACK-UP RING		●		94 70 82***	630	-30°C +100°C	≤0.5
<b>CH32</b> ROD SEAL	· PU · POM BACK-UP RING		●		94 82***	400	-30°C +100°C	≤0.5
<b>CH33</b> ROD SEAL	· PU		●		94	400	-30°C +100°C	≤0.5

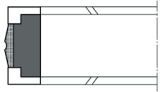

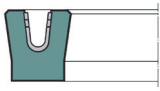
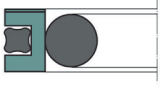
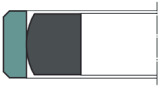
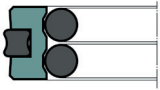
\* For special applications FPM (Viton) is used. \*\* For special applications PTFE with bronze and FPM is used. \*\*\* Hardness value is given in Shore D.

Type	Material	Profile	Rod	Piston	Standard hardness Shore A	Pressure bar	Temperature (max) °C	Sliding speed (max) -m/sec
<b>Hydraulic rod sealing elements</b>								
<b>CH34</b> ROD SEAL	· NBR · FABRIC NBR · FPE · POM BACK-UP RING · FKM*		●		80 80 55*** 82*** 80	700	-30°C +105°C -15°C +200°C*	≤5.0 0.5
<b>CH35</b> ROD SEAL	· NBR + PTFE · PTFE** · FKM*		●		70 58***	400	-30°C +105°C -15°C + 200°C	≤10.0
<b>CH37</b> ROD SEAL	· FABRIC NBR · NBR · POM BACK-UP RING · FKM*		●		80 80 82*** 80	400	-30°C +105°C -15°C +200°C*	≤0.5
<b>CH38</b> ROD SEAL	· PU		●		94	400	-30°C +110°C	≤0.5
<b>CH39</b> ROD SEAL	· NBR · FABRIC NBR		●		80 80	250	-30°C +105°C	≤0.5
<b>CH97</b> ROD SEAL	· HNBR		●		90	150	-30°C +150°C	0.5
<b>CH701</b> SPRING LOADED ROD SEAL	· PTFE · STAINLESS STEEL		●		65***	350	-150°C +250°C	≤15.0
<b>CH704</b> ROD SEAL	· NBR · PTFE		●		80 58***	400	-30°C +105°C	≤10.0
<b>CH709</b> ROD SEAL	· PTFE** · NBR · FKM*		●		58*** 70	400	-30°C +105°C	≤10.0
<b>Hydraulic piston sealing elements</b>								
<b>CH03</b> PISTON PACKING	· FABRIC NBR · POM · FKM*			●	80 82*** 80	400	-30°C +105°C -15°C +200°C*	≤0.5
<b>CH15</b> PISTON SEAL	· NBR · PU			●	70 95	250	-30°C +100°C	≤0.5
<b>CH16</b> COMPACT PISTON SEAL	· NBR · FABRIC NBR · POM · FKM*			●	80 80 82*** 80	400	-30°C +105°C -15°C +200°C**	≤0.5
<b>CH17</b> PISTON SEAL	· NBR · PTFE** · FKM*			●	70 65*** 70	400	-30°C +105°C -15°C +200°C**	≤10.0
<b>CH18</b> COMPACT PISTON SEAL	· POM · TPE · NBR · FKM**			●	82*** 72*** 80 80	400	-30°C +105°C -15°C +200°C**	≤0.5

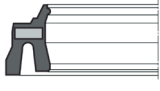
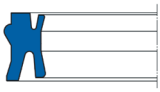
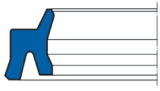



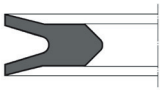
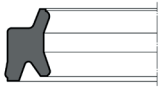
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Type	Material	Profile	Rod	Piston	Standard hardness Shore A	Pressure bar	Temperature (max) °C	Sliding speed (max) -m/sec
<b>Hydraulic piston sealing elements</b>								
<b>CH19</b> HEAVY DUTY PISTON SEAL	· PTFE · POM · NBR · FKM**			●	65 82*** 80 80	400	-30°C +105°C -15°C +200°C**	≤1.5
<b>CH23</b> PISTON SEAL	· NBR · PU · FKM*			●	90 92 80	150 400	-30°C +105°C -45°C +100°C -15°C +200°C*	≤0.5
<b>CH26</b> PISTON SEAL	· NBR · STEEL SPRING · FKM*			●	90 80	60	-30°C +105°C -15°C +200°C*	≤0.5
<b>CH375</b> PISTON SEAL	· FABRIC NBR · NBR · POM BACK-UP RING · FKM*			●	80 80 82*** 80	400	-30°C +105°C -15°C +200°C*	≤0.5
<b>CH40</b> PISTON SEAL	· PU · POM BACK-UP RING			●	94 82***	400	-35°C +100°C	≤0.5
<b>CH41</b> PISTON SEAL	· PTFE · NBR · O-RING, FKM**			●	65*** 70 80	400	-30°C +105°C -15°C +200°C**	≤10.0
<b>CH42</b> COMPACT PISTON SEAL	· NBR · TPE · POM · FKM*			●	80 55*** 82*** 80	700	-30°C +105°C -15°C +200°C*	≤0.5
<b>CH43</b> PISTON SEAL	· NBR · TPE FABRIC NBR · POM			●	92 80*** 82***	500	-30°C +105°C	≤0.5
<b>CH46</b> COMPACT PISTON SEAL	· PU · POM · NBR			●	90 82*** 70	400	-30°C +100°C	≤0.5
<b>CH48</b> HEAVY DUTY SEAL	· NBR · TPE · POM			●	80 55*** 82***	700	-30°C +105°C	≤0.5
<b>CH 49</b> PISTON SEAL	· PU · NBR			●	60*** 80	400	-30°C +100°C	≤0.5
<b>CH501</b> PISTON SEAL	· NBR · PA			●	70	500	-30°C +105°C	≤1.0
<b>CH502</b> COMPACT PISTON SEAL	· NBR · FABRIC NBR · POM			●	88 88 82***	500	-30°C +105°C	0.5
<b>CH503</b> COMPACT PISTON SEAL	· NBR · TPE · POM			●	80 72*** 82***	400	-30°C +105°C	≤0.5
<b>CH504</b> COMPACT PISTON SEAL	· NBR · FABRIC NBR · POM			●	80 80 82***	500	-30°C +105°C	≤0.5

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Type	Material	Profile	Rod	Piston	Standard hardness Shore A	Pressure bar	Temperature (max) °C	Sliding speed (max) -m/sec
<b>Hydraulic piston sealing elements</b>								
<b>CH505</b> COMPACT PISTON SEAL	· NBR · FABRIC NBR · POM		●	●	80 80 82***	500	-30°C +105°C	≤0.5
<b>CH518</b> COMPACT PISTON SEAL	· NBR · TPE · POM		●	●	80 72*** 82***	400	-30°C +105°C	≤0.5
<b>CH751</b> SPRING LOADED PISTON SEAL	· PTFE · STAINLESS STEEL		●	●	65***	350	-150°C +250°C	≤15.0
<b>CH753</b> PISTON SEAL	· PTFE · NBR O-RING, X-RING · FKM**		●	●	65*** 70 70	400	-30°C +105°C -15°C +200°C**	≤2.0
<b>CH755</b> PISTON SEAL	· NBR · PTFE		●	●	80 65***	400	-30°C +105°C	≤10.0
<b>CH757</b> PISTON SEAL	· PTFE · NBR		●	●	60 70	400	-30°C +105°C	2.0

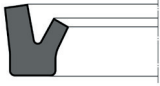

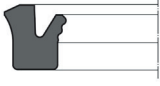
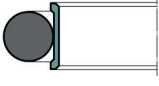
## Pneumatic rod sealing elements

<b>CH30</b> PNEUMATIC COMBI SEAL	· STEEL · NBR · FKM*		●	●	- 70 80	16	-30°C +105°C -15°C +200°C*	≤1.0
<b>CH51</b> PNEUMATIC ROD SEAL	· PU		●	●	92	16	-30°C +80°C	≤1.0
<b>CH52</b> PNEUMATIC ROD SEAL	· NBR · PU · FKM*		●	●	90 92 80	12 16	-30°C +105°C -30°C +80°C -15°C +200°C*	≤1.0
<b>CH53</b> PNEUMATIC CUSHIONING SEAL	· NBR · PU · FKM*		●	●	90 92 80	12 16	-30°C +105°C -30°C +80°C -15°C +200°C*	≤1.0
<b>CH56</b> PNEUMATIC ROD SEAL	· NBR · TPE · FKM**		●	●	80 55*** 80	16	-30°C +105°C -15°C +200°C**	≤1.0
<b>CH64</b> PNEUMATIC ROD SEAL	· PU		●	●	90	16	-30°C +80°C	≤1.0
<b>CH67</b> PNEUMATIC ROD SEAL	· NBR		●	●	70	12	-30°C +105°C	1.0
<b>CH106</b> PNEUMATIC WIPER	· NBR		●	●	80	12	-30°C +105°C	1.0


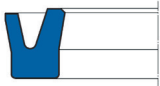



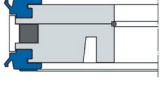




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Type	Material	Profile	Rod	Piston	Standard hardness Shore A	Pressure bar	Temperature (max) °C	Sliding speed (max) -m/sec
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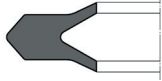


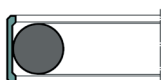
## Pneumatic rod sealing elements

<b>CH109</b> PNEUMATIC ROD SEAL	· NBR		●		80	16	-30°C +105°C	1.0
<b>CH130</b> PNEUMATIC ROD SEAL	· NBR		●		80	12	-30°C +105°C	≤1.0
<b>CH131</b> PNEUMATIC ROD SEAL	· NBR		●		74	12	-30°C +105°C	1.0
<b>CH715</b> PNEUMATIC ROD SEAL	· PTFE · NBR		●		58*** 70	40	-30°C +105°C	≤10.0

## Pneumatic piston sealing elements

<b>CH25</b> PNEUMATIC PISTON SEAL	· STEEL · NBR · FKM*			●	- 75 80	16	-30°C +105°C -15°C +200°C*	≤1.0
<b>CH50</b> PNEUMATIC PISTON SEAL	· NBR · FKM*			●	80 80 80	16 12	-30°C + 80°C -30°C +105°C -15°C +200°C*	≤1.0 ≤1.0
<b>CH54</b> PNEUMATIC PISTON SEAL	· NBR · FKM*			●	70 80	12	-30°C +105°C -15°C +200°C*	≤1.0
<b>CH55</b> PNEUMATIC PISTON SEAL	· ALUMINIUM · NBR · FKM*			●	70 80	12	-30°C +105°C -15°C +200°C*	≤1.0
<b>CH57</b> PNEUMATIC PISTON SEAL	· ALUMINIUM · NBR · FKM*			●	70 80	12	-30°C +105°C -15°C +200°C*	≤1.0
<b>CH58</b> PNEUMATIC PISTON SEAL	· ALUMINIUM · MAGNET · PU · POM			●	- 90 82***	16	-30°C +80°C	≤1.0
<b>CH59</b> PNEUMATIC PISTON SEAL	· NBR · PU · FKM*			●	80 85 80	12 16 -	-30°C +105°C -30°C +100°C -15°C +200°C*	≤1.0
<b>CH61</b> PNEUMATIC PISTON SEAL	· NBR · NBR · POM · ALUMINIUM			●	70 80 82*** -	12	-30°C +105°C	≤1.0
<b>CH62</b> PNEUMATIC PISTON SEAL	· NBR · FKM*			●	70 80	12	-30°C +105°C -15°C +200°C*	≤1.0
<b>CH63</b> PNEUMATIC PISTON SEAL	· NBR · FKM*			●	70 80	12	-30°C +105°C -15°C +200°C*	≤1.0

\* For special applications FPM (Viton) is used. \*\* For special applications PTFE with bronze and FPM is used. \*\*\* Hardness value is given in Shore D.

Type	Material	Profile	Rod	Piston	Standard hardness Shore A	Pressure bar	Temperature (max) °C	Sliding speed (max) -m/sec
<b>Pneumatic piston sealing elements</b>								
<b>CH65</b> PNEUMATIC PISTON SEAL	- NBR		●	●	70	12	-30°C +105°C	≤1.0
<b>CH66</b> PNEUMATIC PISTON SEAL	- NBR		●	●	80	16	-30°C +105°C	1.0
<b>CH506</b> PNEUMATIC PISTON SEAL	- NBR		●	●	80	16	-30°C +105°C	1.0
<b>CH761</b> PNEUMATIC PISTON SEAL	- PTFE - NBR		●	●	58*** 70	40	-30°C +105°C	≤10.0

<b>Wipers</b>								
<b>CH05</b> WIPER	- PU		●	●	95		-30°C +100°C	≤1.0
<b>CH06</b> WIPER	- NBR - PU - FKM*		●	●	90 92 80		-30°C +105°C -40°C +100°C -15°C +200°C*	≤1.0
<b>CH07</b> METAL CASE WIPER	- STEEL - NBR - PU - FKM*		●	●	90 92 80		-30°C +105°C -40°C +100°C -15°C +200°C*	≤1.0
<b>CH09</b> WIPER	- NBR - PU - FKM*		●	●	90 92 90		-30°C +105°C -40°C +100°C -15°C +200°C*	≤1.0
<b>CH10</b> DOUBLE WIPER	- NBR - FKM*		●	●	90 80		-30°C +105°C -15°C +200°C*	≤1.0
<b>CH11</b> WIPER	- TPE		●	●	55***		-40°C +120°C	≤2.0
<b>CH12</b> METAL CASE WIPER	- STEEL - PU		●	●	95		-30°C +100°C	≤1.0
<b>CH13</b> METAL CASE WIPER	- PU - STEEL		●	●	95		-35°C +100°C	1.0
<b>CH27</b> DOUBLE WIPER	- NBR - PU - FKM*		●	●	90 92 80		-30°C +105°C -40°C +100°C -15°C +200°C*	≤1.0
<b>CH94</b> WIPER	- PU		●	●	94		-35°C +110°C	≤1.0

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Type	Material	Profile	Rod	Piston	Standard hardness Shore A	Pressure bar	Temperature (max) °C	Sliding speed (max) -m/sec
<b>Wipers</b>								
<b>CH101</b> EXTERNAL WIPER	· PU		●		92		-40°C +100°C	≤1.0
<b>CH102</b> WIPER	· PU · STEEL		●		94		-35°C +110°C	1.0
<b>CH103</b> DOUBLE WIPER	· PU		●		92		-40°C +100°C	≤1.0
<b>CH105</b> WIPER	· POM		●		82***		-40°C +110°C	1.0
<b>CH107</b> WIPER	· PU		●		92		-40°C +110°C	1.0
<b>CH703</b> WIPER	· PTFE · NBR O-RING · FKM**		●		58*** 70 70		-30°C +105°C -15°C +200°C**	≤10.0
<b>CH705</b> WIPER	· PTFE · NBR · FKM**		●		70 58*** 80		-30°C +105°C -15°C +200°C**	≤10.0
<b>CH706</b> WIPER	· PTFE · NBR · FKM**		●		58*** 70 70		-30°C +105°C -15°C +200°C	≤10.0
<b>CH716</b> WIPER	· PTFE · NBR · FKM**		●		58*** 70 70		-30°C +105°C -15°C +200°C	≤10.0
<b>Guide elements</b>								
<b>CH68</b> GUIDE RING	· POM FILLED WITH GLASS		●		85***		-30°C +125°C	≤1.0
<b>CH69</b> GUIDE RING	· POM FILLED WITH GLASS			●	85***		-30°C +125°C	≤1.0
<b>CH1210</b> GUIDE RING STRIP	· COTTON FABRIC PNEOLIC COMPOSITES		●	●	-	STATIC: 256 MPa DYNAMIC: 54 MPa	-40°C +130°C	≤1.0
<b>CH1220</b> GUIDE RING STRIP	· FIBRE POLYESTER · COMPOSITE + · FRICTION MODIFIER		●	●	-	STATIC: 330 MPa DYNAMIC: 80 MPa	-40°C +120°C	≤1.0
<b>CH1240</b> GUIDE RING STRIP	· FIBRE POLYESTER · COMPOSITE + PTFE		●	●	-	STATIC: 330 MPa DYNAMIC: 80 MPa	-40°C +120°C	≤1.0

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Type	Material	Profile	Rod	Piston	Standard hardness Shore A	Pressure bar	Temperature (max) °C	Sliding speed (max) -m/sec
<b>Guide elements</b>								
<b>CH1320</b> GUIDE RING STRIP	· ARAMID FABRIC · PNEOLIC COMPOSITE + GRAPHITE		●	●	-	STATIC: 344 MPa DYNAMIC: 80 MPa	-40°C +200°C	≤1.0
<b>CHBT</b> PTFE, BRONZE GUIDE RING STRIP	· PTFE WITH BRONZE		●	●	-		-200°C +260°C	15.0
<b>CHKT</b> GUIDE STRIP	· PTFE WITH CARBON		●	●	-		-200°C +260°C	15.0
<b>CHPB</b> GUIDE STRIP	· POLYESTER RESIN		●	●	-		-40°C/+120°C	1.0
<b>Static Seals</b>								
<b>CH0</b> O-RING	· NBR · FKM* · SI · EPDM · M.M.		●	●	70 75 70 70	63	-30°C +105°C -15°C +200°C* -25°C +200°C -45°C +130°C	≤0.5
<b>CH81</b> BACK-UP RING	· TPE · M.M.		●	●	55***	500	-40°C +120°C	≤1.0
<b>CH82</b> FLANGE SEAL	· PU				95	600	-35°C +110°C	
<b>CH83</b> COVER SEAL INSIDE	· PU				95	600	-35°C +110°C	
<b>CH84</b> COVER SEAL OUTSIDE	· PU				95	600	-35°C +110°C	
<b>CH85</b> STATIC SEAL	· PU				95	600	-35°C +110°C	
<b>CH86</b> STATIC SEAL	· PU				90	600	-40°C +100°C	
<b>CH87</b> FLUID CONNECTOR SEAL	· NBR				85	-	-30°C +105°C	
<b>CH88</b> FLUID CONNECTOR SEAL	· NBR				80	-	-30°C +105°C	
<b>CH89</b> STATIC SEAL	· PU				94	500	-35°C +110°C	

\* For special applications FPM (Viton) is used. \*\* For special applications PTFE with bronze and FPM is used. \*\*\* Hardness value is given in Shore D.

Type	Material	Profile	Rod	Piston	Standard hardness Shore A	Pressure bar	Temperature (max) °C	Sliding speed (max) -m/sec
<b>Special seals</b>								
<b>CHVS</b> V-RING	· NBR · FKM				60 60		-30°C +105°C -15°C +200°C	12 PERIPHERAL
<b>CHVA</b> V-RING	· NBR · FKM				60 60		-30°C +105°C -15°C +200°C	12
<b>CH150</b> CHEVRON RING	· FABRIC · NBR		●		85	250	-30°C +80°C	≤2.0
<b>CH151</b> HIGH PRESSURE CHEVRON RING	· FABRIC NBR · POM RING · PTFE WITH CARBON · BACK-UP RING		●		85 82*** 65***	400	-30°C +80°C	≤2.0
<b>CH152</b> LOW PRESSURE CHEVRON RING	· FABRIC NBR · POM RING		●		85 82***	80	-30°C +80°C	≤2.0
<b>CH154</b> LOW PRESSURE CHEVRON RING	· NBR · FABRIC NBR		●		90	80	-30°C +80°C	2.0
<b>CH155</b> HIGH PRESSURE CHEVRON RING	· NBR · FABRIC NBR · PA		●			400	-30°C +105°C	2.0
<b>CH702</b> ROD SEAL FOR ROTATING APPLICATION	· PTFE · NBR O-RING · FKM**		●		65*** 70 80	300	-30°C +105°C -15°C +200°C**	1-2 PERIPHERAL
<b>CH703</b> PISTON SEAL FOR ROTATING APPLICATION	· PTFE · NBR O-RING · FKM**			●	65*** 70 80	300	-30°C +105°C -15°C +200°C**	1-2 PERIPHERAL
<b>Composite bearings</b>								
<b>CSB</b> COMPOSITE BEARING	SYNTHETIC FIBER- REINFORCED POLY- ESTER COMPOSITE WITH PTFE MICRO- POWDER ADDITIONS		●	●			STATIC: 330 MPa DYNAMIC: 80 MPa	-40°C +120°C 2.5
<b>CSBG</b> COMPOSITE BEARING	SYNTHETIC FIBER- REINFORCED POLY- ESTER COMPOSITE WITH PTFE MICRO- POWDER ADDITIONS.		●	●			STATIC: 330 MPa DYNAMIC: 80 MPa	-40°C +120°C 2.5

\* For special applications FPM (Viton) is used. \*\* For special applications PTFE with bronze and FPM is used. \*\*\* Hardness value is given in Shore D.

## INTERNATIONAL TRACK RECORD

Over the years, Carsten Holm A/S has developed and manufactured standard and customised seals for demanding industrial applications across the globe. We know our market well and strive constantly to improve so that we can continue to meet changing customer needs. We have a solid background of experience with sealing applications in the following industries:



- Marine and Offshore
- Wind Power
- Pharmaceutical
- Food and Beverage
- Machinery
- Mining
- Precision measuring equipment

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