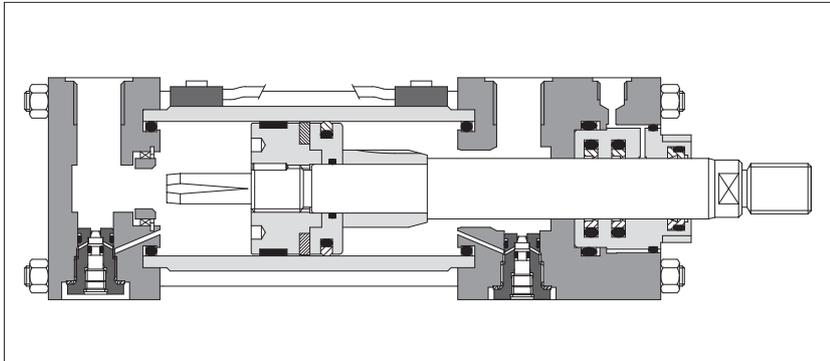


Hydraulic cylinders type **CKS** - with adjustable proximity sensors

to ISO 6020-2 - nominal pressure 10 MPa (100 bar) - max 15 MPa (150 bar)



CKS cylinders are derived from standard CK (tab. B137) with stainless steel piston and housing and with a special design to equip external proximity sensors for rod position detection. "Reed" or "Hall effect" sensors are easily assembled on one of the four tie rods by means of proper clamps which allows to position them along the cylinder housing. The sensors switch their electric circuit when they detect the permanent magnet integrated into the piston. Thus they can be used to perform motion cycles, operating sequences, fast-slow cycles and safety functions.

- Bore sizes from **25** to **100** mm
- **2** rod diameters per bore
- Piston and housing in stainless steel
- Rods and tie rods with rolled threads
- **15** standard mounting styles
- **3** seals options
- Adjustable or fixed cushionings
- Attachments for rods and mounting styles, **see tab. B500**

For cylinder's dimensions and options **see tab. B137**.

1 PROXIMITY SENSORS: MAIN FEATURES

Reed	Hall effect
- High switching power, up to 230 Vdc or Vac - Suitable to directly pilot a power load - 2 wires circuit for easy connection	- Electronic sensor - Infinite electric life (no moving parts inside it) - High sensitivity and switching reliability - Not suitable to directly pilot a power load - 3 wires circuit to avoid voltage drop

2 PROXIMITY SENSORS: MAIN DATA

	Power supply [Vdc/AC]	Max power [W]	Max current [mA]	Voltage drop [V]	Switching time [ms]		Circuit style	Contact (2)	Output	Cable section	Cable shealt	Cable length [mm]	Temperature range [°C]	Protection degree
					ON	OFF								
R (REED)	3 ÷ 230	10VA	500	-	0,5	0,1	2 wires	N.O.	-	2x0,25	PVC	2500	-20 ÷ +85	IP67
S (HALL)	10 ÷ 30 (1)	6	250	0,7	0,2	0,1	3 wires	N.O.	PNP	3x0,14	PVC	2500	-20 ÷ +85	IP67

Notes: (1) Only Vdc
(2) N.O.= Normally Open

3 MODEL CODE

CKS - 50 / 22 * 0500 - S 3 0 1 - R - B1E3X1Z3 **

<p>CYLINDER SERIES CKS according to ISO 6020 - 2</p> <p>BORE SIZE, see section 8 from 25 to 100 mm</p> <p>ROD DIAMETER, see section 8 from 12 to 70 mm</p> <p>STROKE, see section 8 from 20 to 3000 mm</p> <p>MOUNTING STYLE (1)</p> <table style="width: 100%;"> <tr> <td>C = fixed clevis</td> <td>MP1</td> <td>S = fixed eye + spherical bearing</td> <td>MP5</td> </tr> <tr> <td>D = fixed eye</td> <td>MP3</td> <td>T = threaded hole+tie rods extended</td> <td>MX7</td> </tr> <tr> <td>E = feet</td> <td>MS2</td> <td>V = rear tie rods extended</td> <td>MX2</td> </tr> <tr> <td>G = front trunnion</td> <td>MT1</td> <td>W = both end tie rods extended</td> <td>MX1</td> </tr> <tr> <td>H = rear trunnion</td> <td>MT2</td> <td>X = basic execution</td> <td>-</td> </tr> <tr> <td>N = front flange</td> <td>ME5</td> <td>Y = front tie rods extended</td> <td>MX3</td> </tr> <tr> <td>P = rear flange</td> <td>ME6</td> <td>Z = front threaded holes</td> <td>MX5</td> </tr> </table> <p>CUSHIONINGS (1) 0 = none Slow adjustable 4 = rear only 5 = front only 6 = front and rear</p> <p>Fast fixed 7 = rear only 8 = front only 9 = front and rear</p>	C = fixed clevis	MP1	S = fixed eye + spherical bearing	MP5	D = fixed eye	MP3	T = threaded hole+tie rods extended	MX7	E = feet	MS2	V = rear tie rods extended	MX2	G = front trunnion	MT1	W = both end tie rods extended	MX1	H = rear trunnion	MT2	X = basic execution	-	N = front flange	ME5	Y = front tie rods extended	MX3	P = rear flange	ME6	Z = front threaded holes	MX5	<p style="text-align: right;">Series number (2)</p> <p>HEADS' CONFIGURATION (1) (3) Oil ports positions B* = front head X* = rear head Cushioning adjustments positions, to be entered only if adjustable cushionings are selected E* = front head Z* = rear head * = selected position (1, 2, 3 or 4)</p> <p>OPTIONS (3): Rod end (1) F = female thread G = light female thread H = light male thread Proximity sensor type, see sections 1 and 2 (4) P = REED with connector Q = HALL with connector R = REED with cable output S = HALL with cable output Air bleeds (1) A = front air bleed W = rear air bleed Draining (1) L = rod side draining</p> <p>SEALING SYSTEM (1) 1 = (NBR + POLYURETHANE) high static and dynamic sealing 2 = (FKM + PTFE) very low friction and high temperatures 4 = (NBR + PTFE) very low friction and high speeds</p> <p>SPACER, see section 8 0 = none 1 = 25 mm 2 = 50 mm 4 = 100 mm 6 = 150 mm 8 = 200 mm</p>
C = fixed clevis	MP1	S = fixed eye + spherical bearing	MP5																										
D = fixed eye	MP3	T = threaded hole+tie rods extended	MX7																										
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G = front trunnion	MT1	W = both end tie rods extended	MX1																										
H = rear trunnion	MT2	X = basic execution	-																										
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P = rear flange	ME6	Z = front threaded holes	MX5																										

Notes:
(1) For details refer to **tab. B137**
(2) For spare parts request always indicate the series number printed on the nameplate
(3) To be entered in alphabetical order
(4) 2 proximity sensors are included in the supply, for spare parts see section 9

