

# OsiSense for your hoisting applications



Simply easy!™



**Telemecanique**  
Sensors

# > Telemecanique Sensors

Simply easy!

Simplicity



Expertise



Proximity



**Telemecanique Sensors:** a world-class global brand offering a comprehensive line of products with over 25,000 types of sensors, including limit switches, pressure sensors, photoelectric and proximity sensors. In addition, we provide state-of-the-art RFID systems that are compatible with many PLC manufacturers as well as industrial encoders.

**Telemecanique Sensors:** has all the right agency approvals, such as IEC, NEMA, CE, CCC, UL, CSA, EAC.

**Telemecanique Sensors:** focused on three core values — Simplicity, Proximity, and Expertise — we have become experts in factory automation sensors as well as specialists in demanding applications, making our customers' lives "Simply easy!".

# > Innovation focus

OsiSense™ XUK9T offers dedicated functions for overhead crane: [anticollision and tandem](#)

## Robust detection

- Up to 70 m range thanks to time-of-flight method
- Simple alignment with a reflector is allowed by a bright laser red spot

## Improved operator safety

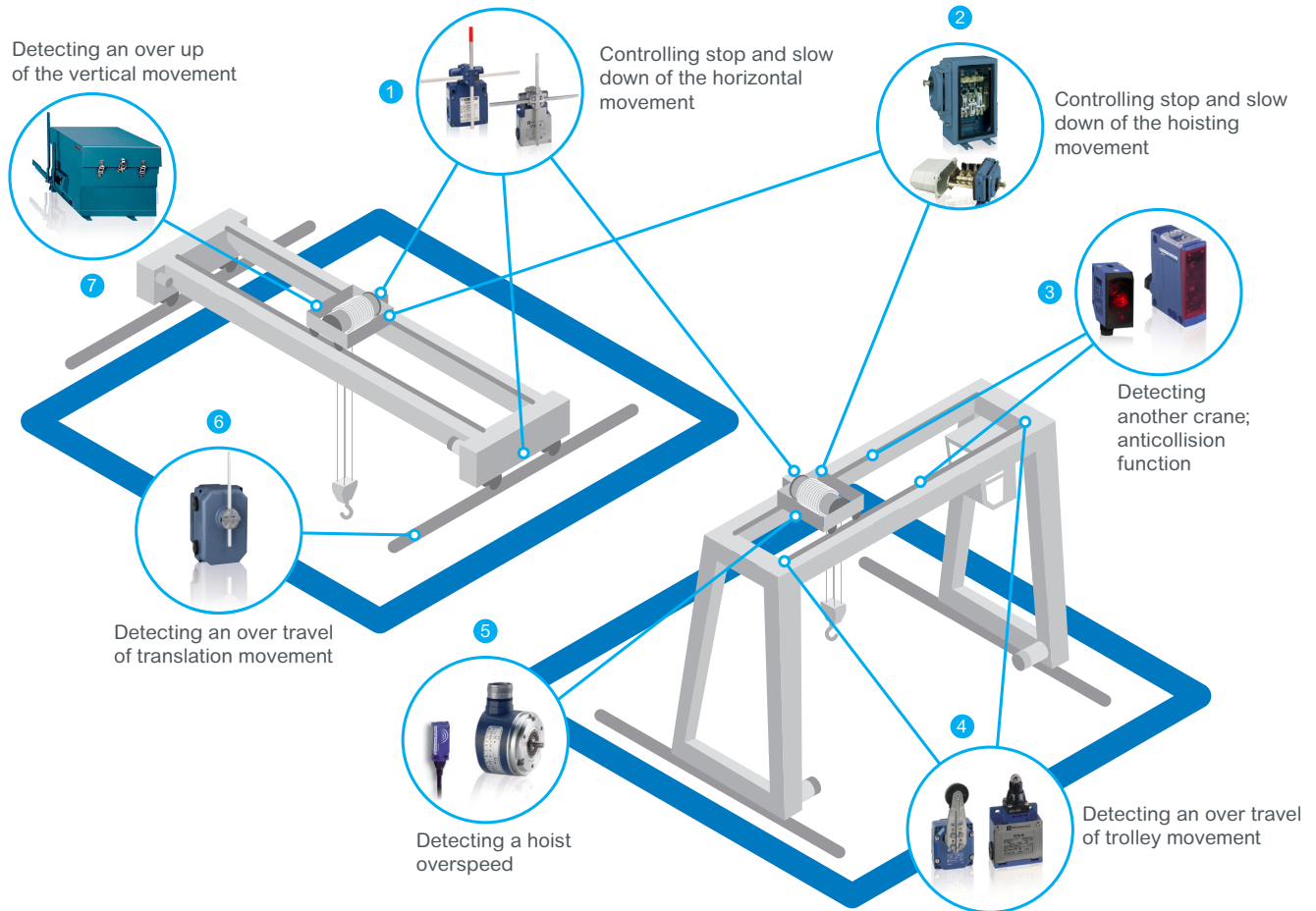
- When several cranes use the same rail, the risk of collisions or dropped load is avoided by the anticollision function
- Monitoring the synchronisation of two cranes to translate heavy or large loads is made possible with the tandem function

## Easy installation and teach-in

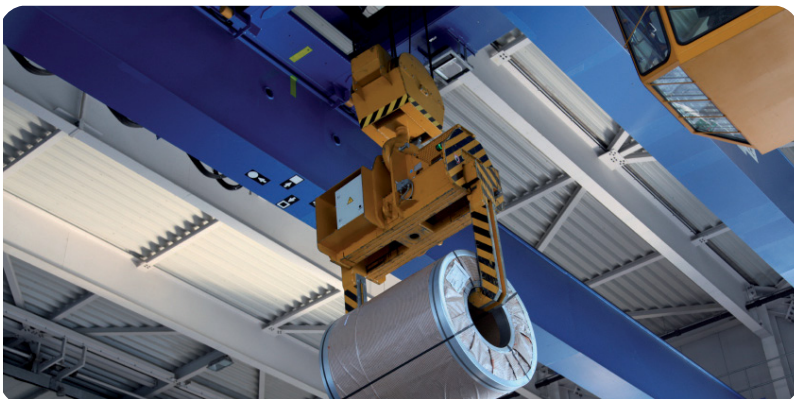
- Compact size (50mm x 50mm x 23mm)
- Teach-in button available on the device or via an external wire



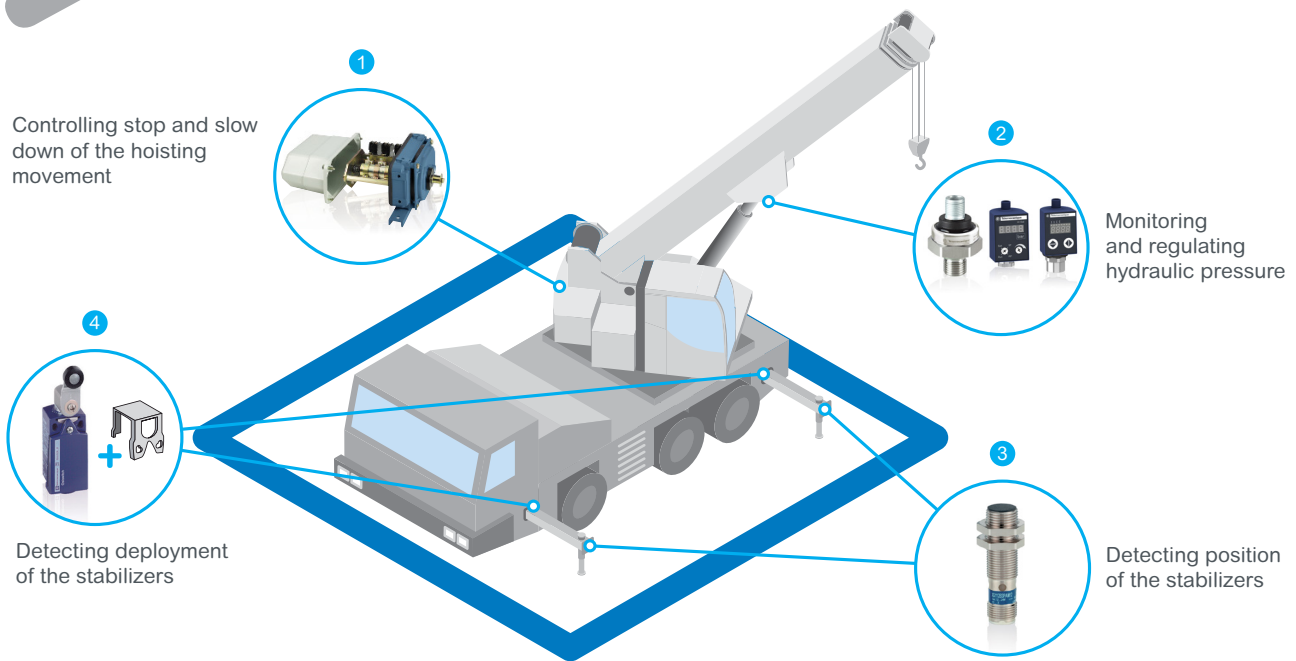
# > Overhead and gantry crane



- |   |                      |  |
|---|----------------------|--|
| 1 | OsiSense XCKVR/XCKMR | 2 ways/2 speeds by one single sensor, compactness and robustness with positivity |
| 2 | OsiSense XR          | Robustness and modularity (up to 28 contacts)                                    |
| 3 | OsiSense XUX/XUK9T   | Long-distance detection  |
| 4 | OsiSense XCKM/XCR    | Robustness with positivity   |
| 5 | OsiSense XCC/XS      | Ease of installation and adjustment  |
| 6 | 7 OsiSense XF        | The ultimate hoisting protection   |

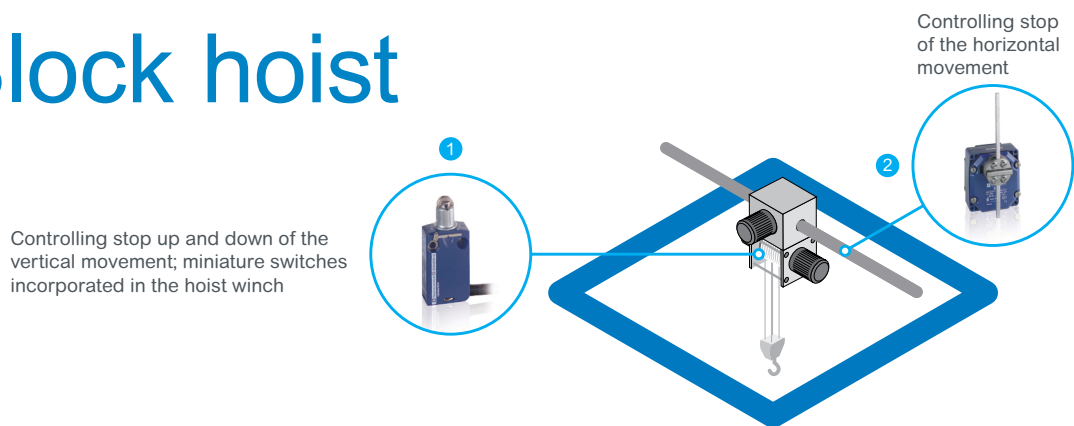


# > Mobile crane

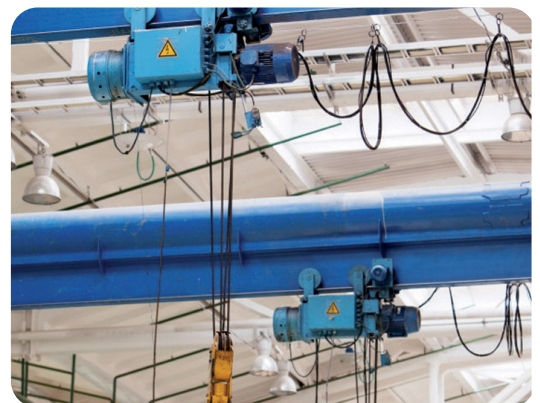


- |   |                         |  |
|---|-------------------------|--|
| 1 | OsiSense XR             | Robustness and modularity                              |
| 2 | OsiSense XMLP/ZMLP/XMLR | Compactness and robustness for reliable regulation     |
| 3 | OsiSense XS             | Ease of installation and adjustment distance detection |
| 4 | OsiSense XCKD + XCKZ05  | Robustness for increased resistance to impact          |

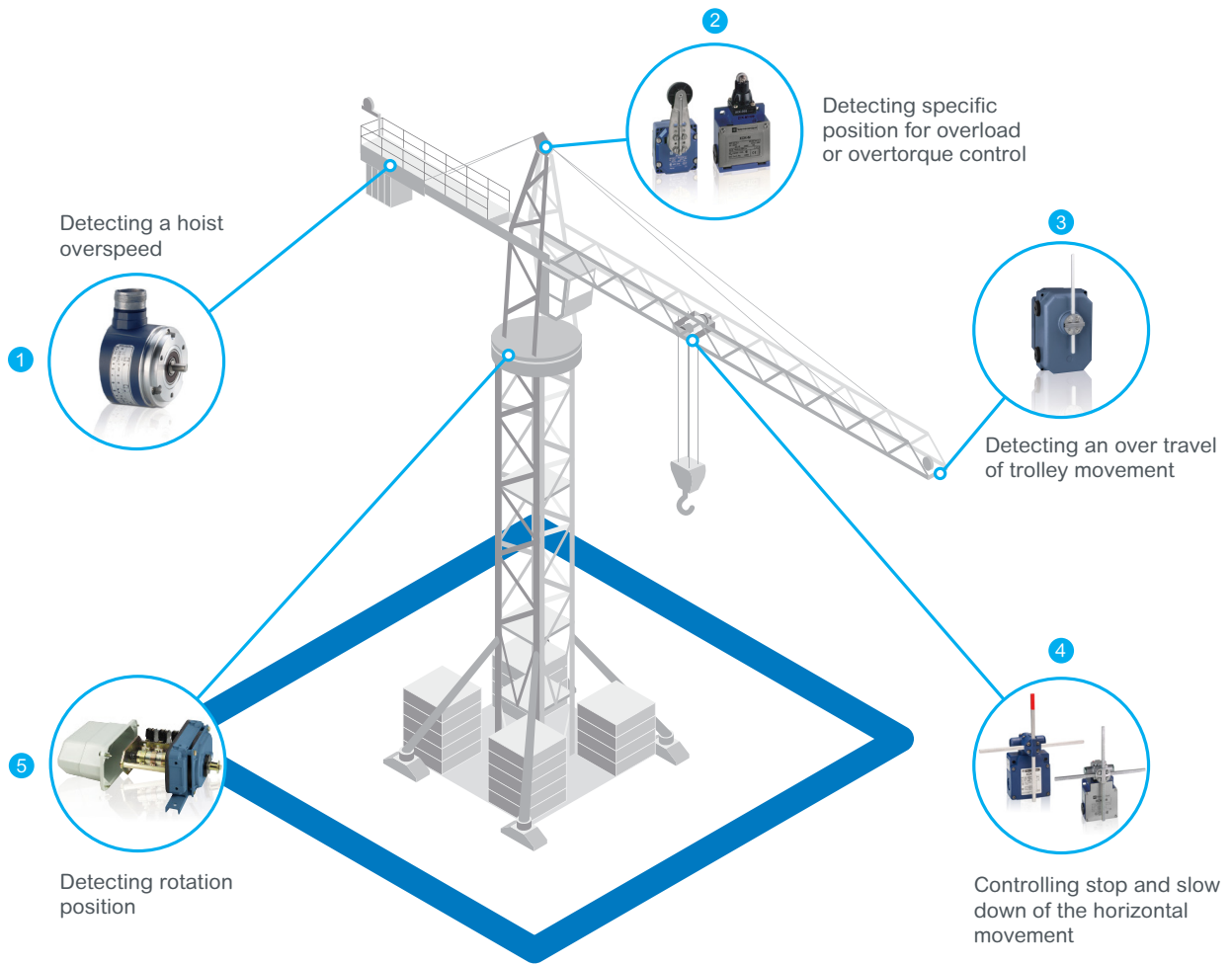
# > Block hoist



- |   |               |  |
|---|---------------|--|
| 1 | OsiSense XCMD | Compactness and modularity of the head for easy mechanical integration |
| 2 | OsiSense XCR  | 2 ways/1 speed, compactness and robustness with positivity             |



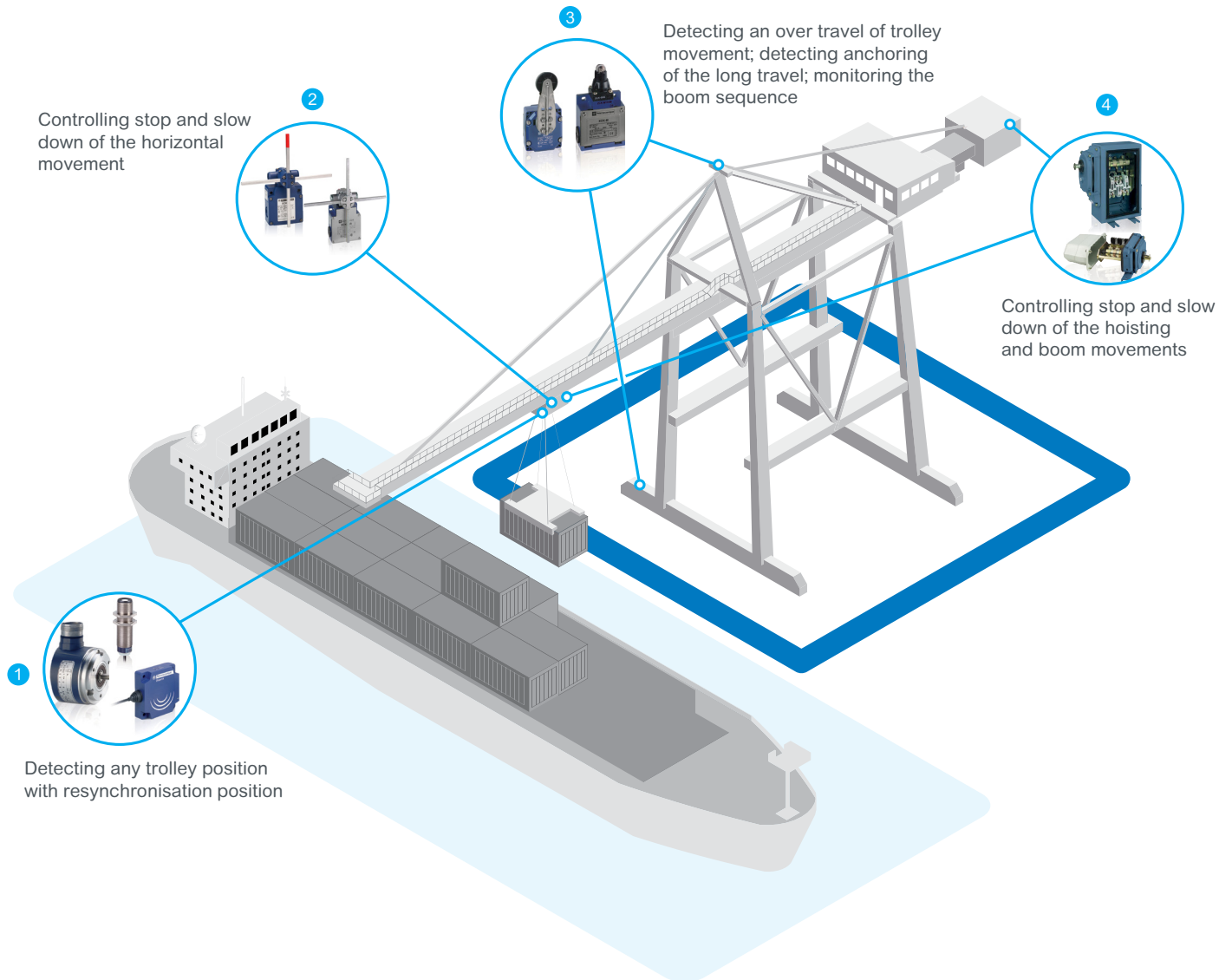
# > Tower crane



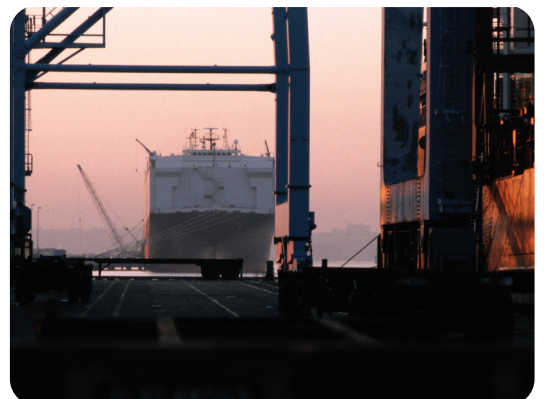
- |                        |  |
|------------------------|--|
| 1 OsiSense XCC         | Ease of installation and adjustment  |
| 2 OsiSense XCKM/XCR    | Robustness with positivity   |
| 3 OsiSense XF          | The ultimate trolley protection  |
| 4 OsiSense XCKVR/XCKMR | 2 ways/2 speeds by one single sensor, compactness and robustness with positivity |
| 5 OsiSense XR          | Robustness and modularity  |



# > Harbour crane



- |   |                      |  |
|---|----------------------|--|
| 1 | OsiSense XCC/XS      | Ease of installation and adjustment  |
| 2 | OsiSense XCKVR/XCKMR | 2 ways/2 speeds by one single sensor, compactness and robustness with positivity |
| 3 | OsiSense XCKM/XCR    | Robustness with positivity   |
| 4 | OsiSense XR          | Robustness and modularity (up to 28 contacts)                                    |





# Choose the best-suited product for your application

## Limit switches



	Contact	Connection				
<b>XCKD Metal</b>	NO+NC Snap	M16 Pg11	XCKD2110P16 XCKD2110G11	XCKD2102P16 XCKD2102G11	XCKD2118P16 XCKD2118G11	
<b>XCMD Metal</b>	NO+NC Snap NO+NC Slow	cable	XCMD2110L1 XCMD2510L1	XCMD2102L1 XCMD2502L1	XCMD2115L1 XCMD2515L1	
<b>XCKM</b>	NO+NC Snap	M20 Pg13	XCKM110H29 XCKM110	XCKM102H29 XCKM102	XCKM115H29 XCKM115	XCKM121H29 XCKM121

<b>XF9D</b>	Contact	Connection	
	4 poles, 25A	Pg21	XF9D251
	4 poles, 65A	Pg29	XF9D651

<b>XF9F</b>	Contact	Connection	
	3 poles, 115A	Pg36	XF9F1151*
	3 poles, 185A		XF9F1851*
	3 poles, 265A		XF9F2651*

\* Reset knob: replace the last 1 by 2 in the reference

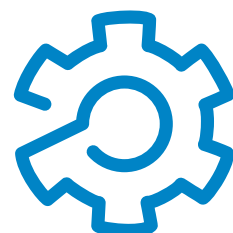
<b>XCKVR Plastic</b>	Contact	Connection	
	'By Pass'	M20x1.5	XCKVR24SR1H29
	'Single Speed'		XCKVR44D1H29
	'Double Speed'		XCKVR54SR1H29

<b>XCKMR Metal</b>	Contact	Connection	
	'By Pass'	M20x1.5	XCKMR24SR1H29
	'Single Speed'		XCKMR44D1H29
	'Double Speed'		XCKMR54D1H29
	'Double Speed'	Pg13.5	XCKMR54D1

<b>XRBA</b>	Contact	Reduction Gear Ratio	
4 cont.		46/1	XRBA43100
		60/1	XRBA44100
		274/1	XRBA47100
6 cont.		13/1	XRBA61100
		46/1	XRBA63100

<b>XR2A</b>	Contact	Reduction Gear Ratio	
3 cont., 10A		20/1	XR2AA03K20
		40/1	XR2AA03K40
		80/1	XR2AA03K80
4 cont., 10A		40/1	XR2AB04K40
		20/1	XR2AB06K20

<b>XCRA</b>	Contact	Connection		
	NO+NC Snap	Pg13.5	XCRA11	XCRA15



Robust and reliable

# Photoelectric sensors



XU			11 m	30 m	70 m	Recommended reflector	Recommended cable
AC/DC	Relay	Terminals	XUX9ARCTN16	XUE1AA2NM12	XUK9TAH2MM12	XUZC100	XZCP29P12L10
24 V	2 PNP + Analogic	M12 - 5 pins M12 - 8 pins				XUZC250	
						XUZC250	

# Inductive sensors



XS	Sensing distance	Ø 12 mm	Ø 18 mm	15x32x8 mm	26x26x13 mm	40x40x15 mm
		4 mm	8 mm	5 mm	10 mm	15 mm
DC 3 wires NO	PNP cable	XS112B3PAL2	XS118B3PAL2	XS7F1A1PAL2	XS7E1A1PAL2	XS7C1A1PAL2
	connector	XS112B3PAM12	XS118B3PAM12	XS7F1A1PAL01M8	XS7E1A1PAM8	XS7C1A1PAM8
	NPN cable	XS112B3NAL2	XS118B3NAL2	XS7F1A1NAL2	XS7E1A1NAL2	XS7C1A1NAL2
	connector	XS112B3NAM12	XS118B3NAM12	XS7F1A1NAL01M8	XS7E1A1NAM8	XS7C1A1NAM8
DC 4 wires NO+NC	PNP connector	XS112B3PCM12	XS118B3PCM12			

# Pressure transmitters

**XM** Hydraulic oils, air, fresh water, sea water, gases

-30 ... +100 °C Bars Psi	PNP		M12 connector*	Switch and display for XMLP	
	2 switching outputs	Analogue 4 ... 20 mA + 1 switching output	Analogue 4 ... 20 mA	2 switching outputs	Analogue 4 ... 20 mA + 1 switching output
100	XMLR100M2P05	XMLR100M1P25	XMLP100BD22	ZMLPA2P0SH	ZMLPA1P2SH
160	XMLR160M2P05	XMLR160M1P25	XMLP160BD22		
250	XMLR250M2P05	XMLR250M1P25	XMLP250BD22		
400	XMLR400M2P05	XMLR400M1P25	XMLP400BD22		
600	XMLR600M2P05	XMLR600M1P25	XMLP600BD22		

\*For EN175301-803-A connector, replace D by C in the reference (example: XMLP250BD22 becomes XMLP250BC22)

# Encoders

XCC	Resolution	Ø 58 mm		Ø 90 mm	
		Solid shaft	Through shaft	Solid shaft	Through shaft
Incremental	500 pts	XCC1510PS05Y			
	1024 pts	XCC1510PS11Y	XCC1514TS11Y		
	10,000 pts			XCC1912PS00KN	XCC1930TS00KN
Absolute multiturm	8192 pts/4096 turns	XCC3510PS84SGN	XCC3514TS84SB	XCC3912PS84SGN	XCC3912TS84SGN

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