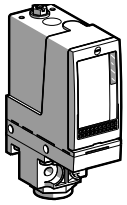
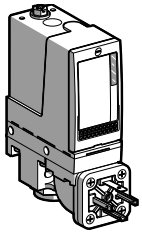
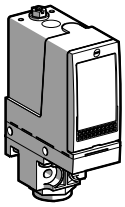
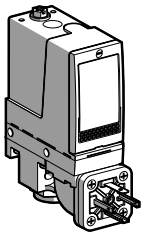
Electromechanical pressure switches

Nautilus® type XML
Size 160 bar (2320 psi)
Fixed differential, for detection of a single threshold
Switches with 1 C/O single-pole contact
Fluid connection 1/4" BSP

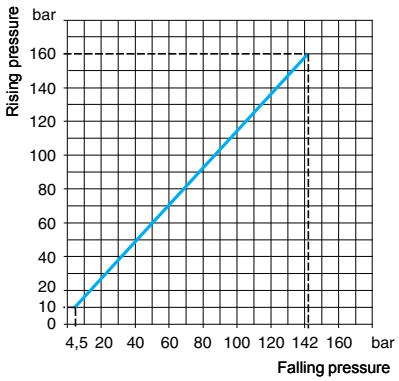
Pressure switches type XML A		With setting scale		Without setting scale	
					
Adjustable range of switching point (PH) (Rising pressure)		**10…160 bar (145…2320 psi)**			
Electrical connection		Terminals	DIN connector	Terminals	DIN connector
References *(1)*					
Fluids controlled *(2)*	Hydraulic oils, up to + 160 °C	**XML A160D2S12**	**XML A160D2C11**	**XML A160D1S12**	**XML A160D1C11**
	Fresh water, sea water, up to + 160 °C	**XML A160E2S12**	**XML A160E2C11**	**XML A160E1S12**	**XML A160E1C11**
	Corrosive fluids, air, up to + 160 °C	**XML A160N2S12**	**XML A160N2C11**	**XML A160N1S12**	**XML A160N1C11**
Weight (kg)		0.750	0.780	0.750	0.780

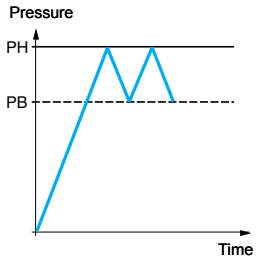
Complementary characteristics not shown under general characteristics (page 30350/3)

Natural differential (subtract from PH to give PB)	At low setting *(3)*	5.5 bar (79.75 psi)
	At high setting *(4)*	18 bar (261 psi)
Maximum permissible pressure	Per cycle	200 bar (2900 psi)
	Accidental	360 bar (5220 psi)
Destruction pressure		720 bar (10 440 psi)
Mechanical life		6 x 10^6 operating cycles
Cable entry for terminal models		1 entry tapped M20 x 1.5 mm for ISO cable gland, clamping capacity 7 to 13 mm
Connector type for connector models		DIN 43650A, 4-pin male. For suitable female connector, see page 30364/2
Pressure switch type		Piston

*(1) For 1 entry tapped for n° 13 cable gland, replace **S12** by **S11** (example: **XML A160D2S12** becomes **XML A160D2S11**).*
(2) Component materials of units in contact with the fluid, see pages 30369/2 and 30369/3.
(3) Deviation of the differential at low setting point for switches of the same size: ± 1 bar (± 14.5 psi).
(4) Deviation of the differential at high setting point for switches of the same size: ± 3 bar (± 43.5 psi).

Operating curves





— Adjustable value
--- Non adjustable value

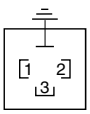
Connection

Terminal model



Connector model

Pressure switch connector pin view



1 → 11 and 13
2 → 12
3 → 14

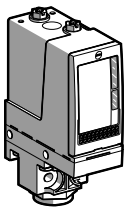
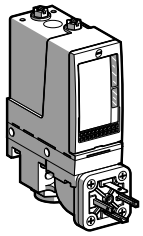
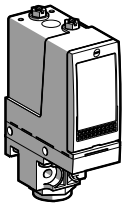
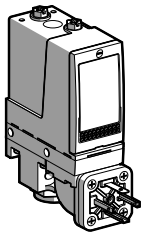
Other versions

Pressure switches with alternative tapped cable entries: NPT etc.
Please consult your Regional Sales Office.

Accessories: page 30364/2
Dimensions: pages 30364/3 to 30364/5

Electromechanical pressure switches

Nautilus® type XML
Size 160 bar (2320 psi)
Adjustable differential, for regulation between 2 thresholds
Switches with 1 C/O single-pole contact
Fluid connection 1/4" BSP

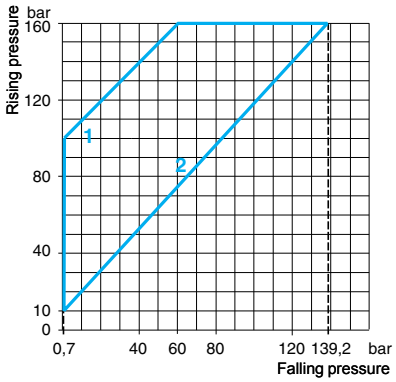
Pressure switches type XML B		With setting scale		Without setting scale	
					
Adjustable range of switching point (PH) (Rising pressure)		**10…160 bar (145…2320 psi)**			
Electrical connection		Terminals	DIN connector	Terminals	DIN connector
References *(1)*					
Fluids controlled *(2)*	Hydraulic oils, up to + 160 °C	**XML B160D2S12**	**XML B160D2C11**	**XML B160D1S12**	**XML B160D1C11**
	Fresh water, sea water, up to + 160 °C	**XML B160E2S12**	**XML B160E2C11**	**XML B160E1S12**	**XML B160E1C11**
	Corrosive fluids, air, up to + 160 °C	**XML B160N2S12**	**XML B160N2C11**	**XML B160N1S12**	**XML B160N1C11**
Weight (kg)		0.750	0.780	0.750	0.780

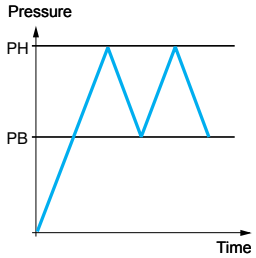
Complementary characteristics not shown under general characteristics (page 30350/3)

Possible differential (subtract from PH to give PB)	Min. at low setting *(3)*	9.3 bar (134.85 psi)
	Min. at high setting *(4)*	20.8 bar (301.6 psi)
	Max. at high setting	100 bar (1450 psi)
Maximum permissible pressure	Per cycle	200 bar (2900 psi)
	Accidental	360 bar (5220 psi)
Destruction pressure		720 bar (10 440 psi)
Mechanical life		6 x 10^6 operating cycles
Cable entry for terminal models		1 entry tapped M20 x 1.5 mm for ISO cable gland, clamping capacity 7 to 13 mm
Connector type for connector models		DIN 43650A, 4-pin male. For suitable female connector, see page 30364/2
Pressure switch type		Piston

*(1) For 1 entry tapped for n° 13 cable gland, replace **S12** by **S11** (example: **XML B160D2S12** becomes **XML B160D2S11**).*
(2) Component materials of units in contact with the fluid, see pages 30369/2 and 30369/3.
(3) Deviation of the differential at low setting point for switches of the same size: - 1.8 bar, + 1.5 bar (- 26.1 psi, + 21.75 psi).
(4) Deviation of the differential at high setting point for switches of the same size: - 1.9 bar, + 1.6 bar (- 27.55 psi, + 23.2 psi).

Operating curves





1 Maximum differential
2 Minimum differential

— Adjustable value

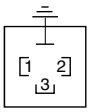
Connection

Terminal model



Connector model

Pressure switch connector pin view



1 → 11 and 13
2 → 12
3 → 14

Other versions

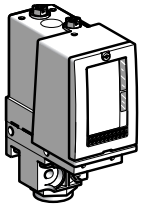
Pressure switches with alternative tapped cable entries: NPT etc.
Please consult your Regional Sales Office.

Accessories: page 30364/2
Dimensions: pages 30364/3 to 30364/5

Electromechanical pressure switches

Nautilus® type XML
Size 160 bar (2320 psi)
Adjustable differential, for regulation between 2 thresholds
Switches with 2 C/O single-pole contacts
Fluid connection 1/4" BSP

Pressure switches type XML C	**With setting scale**



Adjustable range of switching point (PH) (Rising pressure)		**12…160 bar (174…2320 psi)**
Electrical connection		Terminals

References *(1)*

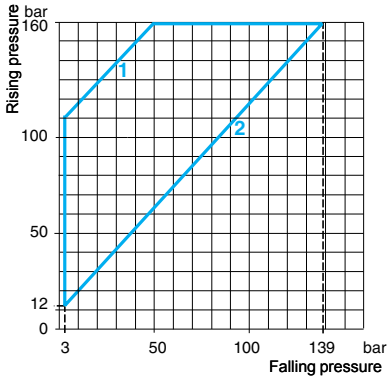
Fluids controlled *(2)*	Hydraulic oils, up to + 160 °C	**XML C160D2S12**
	Fresh water, sea water, up to + 160 °C	**XML C160E2S12**
	Corrosive fluids, up to + 160 °C	**XML C160N2S12**
Weight (kg)		0.750

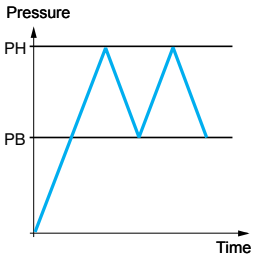
Complementary characteristics not shown under general characteristics (page 30350/3)

Possible differential (subtract from PH to give PB)	Min. at low setting *(3)*	9 bar (130.5 psi)
	Min. at high setting *(3)*	21 bar (304.5 psi)
	Max. at high setting	110 bar (1590 psi)
Maximum permissible pressure	Per cycle	200 bar (2900 psi)
	Accidental	360 bar (5220 psi)
Destruction pressure		720 bar (10 440 psi)
Mechanical life		6 x 10^6 operating cycles
Cable entry for terminal models		1 entry tapped M20 x 1.5 mm for ISO cable gland, clamping capacity 7 to 13 mm
Pressure switch type		Piston

*(1) For 1 entry tapped for n° 13 cable gland, replace **S12** by **S11** (example: **XML C160D2S12** becomes **XML C160D2S11**).*
(2) Component materials of units in contact with the fluid, see pages 30369/2 and 30369/3.
(3) Deviation of the differential at high and low setting points for switches of the same size: ± 0.9 bar (± 13.05 psi).

Operating curves



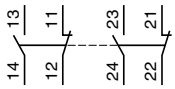


1 Maximum differential
2 Minimum differential

— Adjustable value

Connection

Terminal model



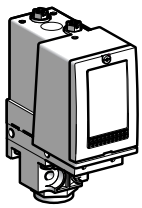
Other versions	Pressure switches with alternative tapped cable entries: NPT etc. Please consult your Regional Sales Office.

Accessories: page 30364/2
Dimensions: pages 30364/3 to 30364/5

Electromechanical pressure switches

Nautilus® type XML
Size 160 bar (2320 psi)
Dual stage, fixed differential, for detection at each threshold
Switches with 2 C/O single-pole contacts (one per stage)
Fluid connection 1/4" BSP

Pressure switches type XML D | **Without setting scale**



Adjustable range of each switching point (Rising pressure)	2nd stage switching point (PH2)	**16.5…160 bar (239.25…2320 psi)**
	1st stage switching point (PH1)	**10.5…154 bar (152.25…2233 psi)**
Spread between 2 stages (PH2 - PH1)		**6…83 bar (87…1203.5 psi)**
Electrical connection		Terminals

References *(1)*

Fluids controlled *(2)*	Hydraulic oils, up to + 160 °C	**XML D160D1S12**
	Fresh water, sea water, up to + 160 °C	**XML D160E1S12**
	Corrosive fluids, air, up to + 160 °C	**XML D160N1S12**
Weight (kg)		0.750

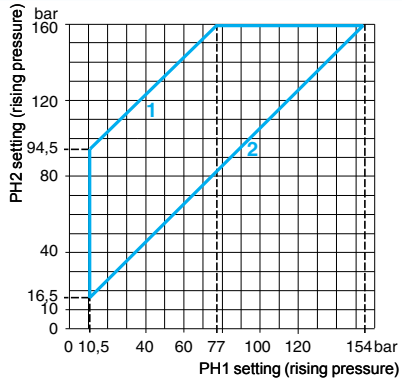
Complementary characteristics not shown under general characteristics (page 30350/3)

Natural differential (subtract from PH1/PH2 to give PB1/PB2)	At low setting *(3)*	8.8 bar (127.6 psi)
	At high setting *(4)*	20 bar (290 psi)
Maximum permissible pressure	Per cycle	200 bar (2900 psi)
	Accidental	360 bar (5220 psi)
Destruction pressure		720 bar (10 440 psi)
Mechanical life		6 x 10^6 operating cycles
Cable entry for terminal models		1 entry tapped M20 x 1.5 mm for ISO cable gland, clamping capacity 7 to 13 mm
Pressure switch type		Piston

(1) For 1 entry tapped for n° 13 cable gland, replace ***S12*** *by* ***S11*** *(example:* ***XML D160D1S12*** *becomes* ***XML D160D1S11****).*
(2) Component materials of units in contact with the fluid, see pages 30369/2 and 30369/3.
(3) Deviation of the differential at low setting point for switches of the same size: ± 1.5 bar (± 21.75 psi).
(4) Deviation of the differential at high setting point for switches of the same size: ± 7 bar (± 101.5 psi).

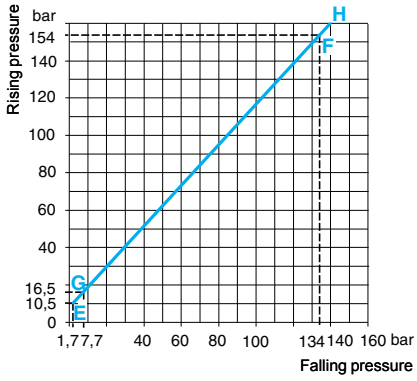
Operating curves

High setting tripping points of contacts 1 and 2

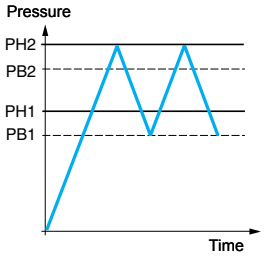


1 Maximum differential
2 Minimum differential

Natural differential of contacts 1 and 2



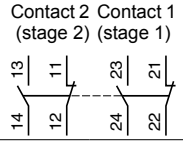
EF Contact 1 (stage 1)
GH Contact 2 (stage 2)



— Adjustable value
--- Non adjustable value

Connection

Terminal model



Other versions

Pressure switches with alternative tapped cable entries: NPT etc.
Please consult your Regional Sales Office.

Accessories: page 30364/2
Dimensions: pages 30364/3 to 30364/5