







Wedge clamp with adjustable electronic position monitoring, rear side fastening.

Inductive proximity switches installed in the flanged housing. The proximity switches are activated by a trip cam which is connected to the piston rod.

The switches can be displaced in a slot. The housing can be turned through 180°.

Position monitoring is available in 3 versions:

- as a compact version for M8 plug
- as a rugged long version for M12 plug
- as a version for high temperatures up to 120°C with fitted cable (L = 5 m).

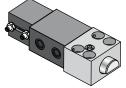
Lubricating nipple _3 max nonitoring \bigcirc Standard: Version A Compact version for M8 plug <u>M8</u> s2

Technical data for position monitoring

Operating voltage: 10 ... 30 V DC Constant current: 200 mA Tripping function: NO Type: PNP Nominal tripping distance: 1.5 mm Ambient temperature: -25 +70°C Version C up to +120°C Protective system: IP 67

Version B **Rugged long** For high version, senso temperatures for M12 plug up to 120 °C with fitted cable (L = 5 m)The position monitoring unit can be turned through 180° (90° on request) The block cylinder can be turned through 180° $\,$





* Clamping force ** Permissible retention force (Explanations see 2.2400 page 2)

Perm. retention force** [kN] Screw property class 8.8	Max. clamping force * [kN]	25	50	100	160	250	400	630		
Max. operating pressure (bar) 350 275 350 35			65	130	210		520	820		
Cylinder-Ø [mm] 25 40 50 63 80 100 125 Max. stroke [mm] 20 25 25 30 32 40 40 Clamping stroke [mm] 15-18 18-22 19-22 23-27 24-29 30-36 30-36 a [mm] 184 218 250 285 330 370 435 b [mm] 58 78 100 125 150 180 225 Ø c H7 x depth [mm] 18/7 26/9 30/11 35/11 48/13 55/16 62/16 d [mm] 18 46 58 75 78 95 108 e [mm] 14 16 20 25 26 32 38 f [mm] 70 95 120 150 200 240 280 g [mm] 48 65 85 106 140 180 210 h [mm] 65 85 100 <	Screw property class 8.8									
Max. stroke [mm] 20 25 25 30 32 40 40 Clamping stroke [mm] 15–18 18–22 19–22 23–27 24–29 30–36 30–36 a [mm] 134 168 200 235 270 310 375 a [mm] 184 218 250 285 330 370 435 b [mm] 58 78 100 125 150 180 225 Ø c H7 x depth [mm] 18/7 26/9 30/11 35/11 48/13 55/16 62/16 d [mm] 38 46 58 75 78 95 108 e [mm] 14 16 20 25 26 32 38 f [mm] 70 95 120 150 200 240 280 g [mm] 48 65 85 100 125 160 200 230 i [mm] 16 585 1	Max. operating pressure (bar)	350	275	350	350	350	350	350		
Clamping stroke [mm]	Cylinder-Ø [mm]	25	40	50	63	80	100	125		
a [mm] 134 168 200 235 270 310 375 a1 [mm] 184 218 250 285 330 370 435 b [mm] 58 78 100 125 150 180 225 Øc H7 x depth [mm] 18/7 26/9 30/11 35/11 48/13 55/16 62/16 d [mm] 38 46 58 75 78 95 108 e [mm] 14 16 20 25 26 32 38 f [mm] 70 95 120 150 200 240 280 g [mm] 48 65 85 100 125 160 200 230 i [mm] 65 85 100 125 160 200 230 i [mm] 111 146 177 210 246 285 344 k [mm] 76 102 127 151 184 215 272 I [mm] 20 25 26 32 40 45 50 m [mm] 45 63 75 95 120 150 180 45 50 M d d d d d d d d d d d d d d d d d d	Max. stroke [mm]	20	25	25	30	32	40	40		
a1 [mm] b mm] 58 78 100 125 150 180 225	Clamping stroke [mm]	15-18	18-22	19-22	23-27	24-29	30-36	30-36		
b [mm] 58 78 100 125 150 180 225 Ø c H7 x depth [mm] 18/7 26/9 30/11 35/11 48/13 55/16 62/16 d [mm] 38 46 58 75 78 95 108 e [mm] 14 16 20 25 26 32 38 f [mm] 70 95 120 150 200 240 280 g [mm] 48 65 85 106 140 180 210 h [mm] 65 85 100 125 160 200 230 i [mm] 111 146 177 210 246 285 344 k [mm] 76 102 127 151 184 215 272 I [mm] 20 25 26 32 40 45 50 m (4x) G ¼ (4x) G ¼ (4x) G ¼ (4x) G ½ (2x)	a [mm]	134	168	200	235	270	310	375		
Ø c H7 x depth [mm] 18/7 26/9 30/11 35/11 48/13 55/16 62/16 d [mm] 38 46 58 75 78 95 108 e [mm] 14 16 20 25 26 32 38 f [mm] 70 95 120 150 200 240 280 g [mm] 48 65 85 106 140 180 210 h [mm] 65 85 100 125 160 200 230 i [mm] 111 146 177 210 246 285 344 k [mm] 76 102 127 151 184 215 272 1 [mm] 20 25 26 32 40 45 50 m (4x) G ¼ (4x) G ¼ (4x) G ½ (2x) G ½ (2x) G ½ (2x) G ½ n [mm] 45 63 75 95 120 <	a1 [mm]	184	218	250	285	330	370	435		
d [mm] 38	b [mm]	58	78	100	125	150	180	225		
e [mm]	Ø c H7 x depth [mm]	18/7	26/9	30/11	35/11	48/13	55/16	62/16		
f[mm] 70 95 120 150 200 240 280 g [mm] 48 65 85 106 140 180 210 h [mm] 65 85 100 125 160 200 230 i [mm] 111 146 177 210 246 285 344 k [mm] 76 102 127 151 184 215 272 I [mm] 20 25 26 32 40 45 50 m (4x) G ¼ (4x) G ¼ (4x) G ½ (2x) G ½	d [mm]	38	46	58	75	78	95	108		
g [mm]	e [mm]	14	16	20	25	26	32	38		
h [mm] 65 85 100 125 160 200 230 i [mm] 111 146 177 210 246 285 344 k [mm] 76 102 127 151 184 215 272 I [mm] 20 25 26 32 40 45 50 m (4x) G ¼ (4x) G ¼ (4x) G ½ (2x) G ½ (2x) G ½ (2x) G ½ n [mm] 45 63 75 95 120 150 180 Ø o [mm] 30 40 55 70 80 100 125 p [mm] 21,5 28 37 49 55 75 85 r [mm] 48 65 80 105 125 160 190 s [mm] 13 18 20 26 32 38 44 Ø t [mm] 20 26 32 40 48 57 66 v [mm] 15 18 25 30 30 50 6	f [mm]	70	95	120	150	200	240	280		
i [mm] 111 146 177 210 246 285 344 k [mm] 76 102 127 151 184 215 272 I [mm] 20 25 26 32 40 45 50 m (4x) G ¼ (4x) G ¼ (4x) G ½ (2x) G ½ (2x) G ½ (2x) G ½ n [mm] 45 63 75 95 120 150 180 Ø o [mm] 30 40 55 70 80 100 125 p [mm] 21,5 28 37 49 55 75 85 r [mm] 48 65 80 105 125 160 190 s [mm] 13 18 20 26 32 38 44 Ø t [mm] 20 26 32 40 48 57 66 v [mm] 15 18 25 30 30 50 60 w [mm] 19,5 23,5 30,5 37 38 60 7	g [mm]	48	65	85	106	140	180	210		
k [mm] 76 102 127 151 184 215 272 I [mm] 20 25 26 32 40 45 50 m (4x) G ¼ (4x) G ¼ (4x) G ½ (2x) G ½ (2x) G ½ (2x) G ½ n [mm] 45 63 75 95 120 150 180 Ø o [mm] 30 40 55 70 80 100 125 p [mm] 21,5 28 37 49 55 75 85 r [mm] 48 65 80 105 125 160 190 s [mm] 13 18 20 26 32 38 44 Ø t [mm] 13 17 21 26 33 39 45 Ø u [mm] 20 26 32 40 48 57 66 v [mm] 15 18 25 30 30 50 60 <td>h [mm]</td> <td>65</td> <td>85</td> <td>100</td> <td>125</td> <td>160</td> <td>200</td> <td>230</td>	h [mm]	65	85	100	125	160	200	230		
I Imm 20	i [mm]	111	146	177	210	246	285	344		
m (4x) G ¼ (4x) G ¼ (4x) G ½ (2x) G ½ (2	k [mm]	76	102	127	151	184	215	272		
n [mm] 45 63 75 95 120 150 180 Ø o [mm] 30 40 55 70 80 100 125 p [mm] 21,5 28 37 49 55 75 85 r [mm] 48 65 80 105 125 160 190 s [mm] 13 18 20 26 32 38 44 Ø t [mm] 13 17 21 26 33 39 45 Ø u [mm] 20 26 32 40 48 57 66 v [mm] 15 18 25 30 30 50 60 w [mm] 19,5 23,5 30,5 37 38 60 70 Screw DIN 912-8.8 (4 pieces) M 12 M 16 M 20 M 24 M 30 M 36 M 42 Tightening torque [hm] 86 210 410 710 1450 2520 450 Weight [kg] 3,0 6,5 11,4 21,7 41 74,7 126 Part no. 4604 670 4604 671 4604 672 4604 673 4604 674 4604 675 4604 675	I [mm]	20	25	26	32	40	45	50		
Ø o [mm] 30 40 55 70 80 100 125 p [mm] 21,5 28 37 49 55 75 85 r [mm] 48 65 80 105 125 160 190 s [mm] 13 18 20 26 32 38 44 Ø t [mm] 13 17 21 26 33 39 45 Ø u [mm] 20 26 32 40 48 57 66 v [mm] 15 18 25 30 30 50 60 w [mm] 19,5 23,5 30,5 37 38 60 70 Screw DIN 912-8.8 (4 pieces) M 12 M 16 M 20 M 24 M 30 M 36 M 42 Tightening torque [Nm] 86 210 410 710 1450 2520 4050 Weight [kg] 3,0 6,5 11,4 21,7 <	m	(4x) G 1/4	(4x) G 1/4	(4x) G 1/4	(4x) G 1/2	(2x) G 1/2	(2x) G 1/2	(2x) G 1/2		
p [mm] 21,5 28 37 49 55 75 85 r [mm] 48 65 80 105 125 160 190 s [mm] 13 18 20 26 32 38 44 Ø t [mm] 13 17 21 26 33 39 45 Ø u [mm] 20 26 32 40 48 57 66 v [mm] 15 18 25 30 30 50 60 w [mm] 19,5 23,5 30,5 37 38 60 70 Screw DIN 912-8.8 (4 pieces) M12 M 16 M 20 M 24 M 30 M 36 M 42 Tightening torque [Nm] 86 210 410 710 1450 2520 4050 Weight [kg] 3,0 6,5 11,4 21,7 41 74,7 126 Part no. 4604 670 4604 671 4604 672 <th< td=""><td>n [mm]</td><td>45</td><td>63</td><td>75</td><td>95</td><td>120</td><td>150</td><td>180</td></th<>	n [mm]	45	63	75	95	120	150	180		
r [mm]	Ø o [mm]	30	40	55	70	80	100	125		
s [mm] 13 18 20 26 32 38 44 Ø t [mm] 13 17 21 26 33 39 45 Ø u [mm] 20 26 32 40 48 57 66 v [mm] 15 18 25 30 30 50 60 w [mm] 19,5 23,5 30,5 37 38 60 70 Screw DIN 912-8.8 (4 pieces) M 12 M 16 M 20 M 24 M 30 M 36 M 42 Tightening torque [Nm] 86 210 410 710 1450 2520 4050 Weight [kg] 3,0 6,5 11,4 21,7 41 74,7 126 Part no. 4604 670 4604 671 4604 672 4604 673 4604 674 4604 675 4604 675	p [mm]	21,5	28	37	49	55	75	85		
Øt [mm] 13 17 21 26 33 39 45 Øu [mm] 20 26 32 40 48 57 66 v [mm] 15 18 25 30 30 50 60 w [mm] 19,5 23,5 30,5 37 38 60 70 Screw DIN 912-8.8 (4 pieces) M 12 M 16 M 20 M 24 M 30 M 36 M 42 Tightening torque [Nm] 86 210 410 710 1450 2520 4050 Weight [kg] 3,0 6,5 11,4 21,7 41 74,7 126 Part no. 4604 670 4604 671 4604 672 4604 673 4604 674 4604 675 4604 675	r [mm]	48	65	80	105	125	160	190		
Ø u [mm] 20 26 32 40 48 57 66 v [mm] 15 18 25 30 30 50 60 w [mm] 19,5 23,5 30,5 37 38 60 70 Screw DIN 912-8.8 (4 pieces) M 12 M 16 M 20 M 24 M 30 M 36 M 42 Tightening torque [Nm] 86 210 410 710 1450 2520 4050 Weight [kg] 3,0 6,5 11,4 21,7 41 74,7 126 Part no. 4604 670 4604 671 4604 672 4604 673 4604 674 4604 675 4604 675	s [mm]	13	18	20	26	32	38	44		
v [mm] 15 18 25 30 30 50 60 w [mm] 19,5 23,5 30,5 37 38 60 70 Screw DIN 912-8.8 (4 pieces) M 12 M 16 M 20 M 24 M 30 M 36 M 42 Tightening torque [Nm] 86 210 410 710 1450 2520 4050 Weight [kg] 3,0 6,5 11,4 21,7 41 74,7 126 Part no. 4604 670 4604 671 4604 672 4604 673 4604 674 4604 675 4604 675	Øt[mm]	13	17	21	26	33	39	45		
w [mm] 19,5 23,5 30,5 37 38 60 70 Screw DIN 912-8.8 (4 pieces) M 12 M 16 M 20 M 24 M 30 M 36 M 42 Tightening torque [Nm] 86 210 410 710 1450 2520 4050 Weight [kg] 3,0 6,5 11,4 21,7 41 74,7 126 Part no. 4604 670 4604 671 4604 672 4604 673 4604 674 4604 675 4604 676	Ø u [mm]	20	26	32	40	48	57	66		
Screw DIN 912-8.8 (4 pieces) M 12 M 16 M 20 M 24 M 30 M 36 M 42 Tightening torque [Nm] 86 210 410 710 1450 2520 4050 Weight [kg] 3,0 6,5 11,4 21,7 41 74,7 126 Part no. 4604 670 4604 671 4604 672 4604 673 4604 674 4604 675 4604 676	v [mm]	15	18	25	30	30	50	60		
Tightening torque [Nm] 86 210 410 710 1450 2520 4050 Weight [kg] 3,0 6,5 11,4 21,7 41 74,7 126 Part no. 4604 670 4604 671 4604 672 4604 673 4604 674 4604 675 4604 676	w [mm]	19,5	23,5	30,5	37	38	60	70		
Weight [kg] 3,0 6,5 11,4 21,7 41 74,7 126 Part no. 4604 670 4604 671 4604 672 4604 673 4604 674 4604 675 4604 676	Screw DIN 912-8.8 (4 pieces)	M 12	M 16	M 20	M 24	M 30	M 36	M 42		
Part no. 4604 670 4604 671 4604 672 4604 673 4604 674 4604 675 4604 676	Tightening torque [Nm]	86	210	410	710	1450	2520	4050		
	Weight [kg]	3,0	6,5	11,4	21,7	41	74,7	126		
Always add the desired sensor version to the part no., e.g., 4604 670 B	Part no.	4604 670	4604 671	4604 672	4604 673	4604 674	4604 675	4604 676		
	Always add the desired sensor version to the part no., e.g., 4604 670 B									
Accessories Bushings DIN 179 12 x 12 17 x 16 21 x 20 26 x 20 32 x 25 38 x 30 44 x 30	Accessories Bushings DIN 179	12 x 12	17 x 16	21 x 20	26 x 20	32 x 25	38 x 30	44 x 30		
Part no. 3300 285 3300 287 3300 288 3300 289 3300 420 3300 430 3300 440	Part no.	3300 285	3300 287	3300 288	3300 289	3300 420	3300 430	3300 440		





Technical details of accessories:

Adjustable position monitoring for wedge clamps

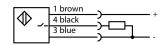
Description

The position monitoring unit is fixed to the cylinder bottom by means of screws. It can be fastened in a position turned by 180°. Various versions are available to suit different applications. The trip cam for activating the proximity switches is positioned on the continuous piston rod. The tripping position is adjusted by displacing the proximity switches in the lateral slot. The proximity switches are activated by the trip cam within a stroke of approx. 6 mm. The minimum distance of the tripping positions depends on the type of switch and is indicated in the table.

Function

- 1. Function message of the unclamped position, i.e. the piston rod has retracted.
- 2. Message of the clamped position, i.e. the piston rod has extended and is in the clamping range.

Wiring diagram



Important information

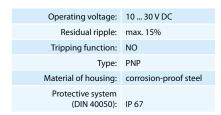
The position monitoring unit is not suitable for use in areas with coolant. Also, additional covers must be provided to protect the system from any swarf.

Planning - Conditions of application - Protective measures

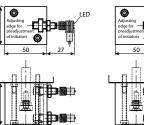
Careful planning is of great importance. The conditions of application and the protective measures must be taken into consideration and ensured.

Please contact us for more detailed information.

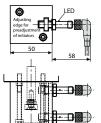
Technical data of inductive proximity switches



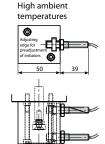
Version A (standard) Compact version M8



Version B Long version M12



Version C



Ambient temperature TA	-25°+70°C	−25°+70°C	−25° +120°C
Min. distance of tripping position [mm]	8	13	8
Type of connection	plug	plug	Teflon cable 3 x 0,14 mm2
LED visualisation of function	in the plug	yes	no
Max. constant currrent [mA]	200	200	200 - (from 70°C) 100
Nominal tripping distance [mm]	1,5	1,5	2
Short-circuit proof	yes	yes	no
Connecting cable [m]	5	5	3
Proximity switch Part no.	6.3829.0980	2.5012.0064	6.3829.0870
Plug with cable Part no.	3829099	2.0975.0024	fixed
-			
L1 complete [mm]	50	50	50
Position monitoring up to 30 mm total stroke Part no. (without a plug) up to type 4604 673	7.6282.0010 A	7.6282.0010 B	7.6282.0010 C
L1 complete [mm]	60	60	60