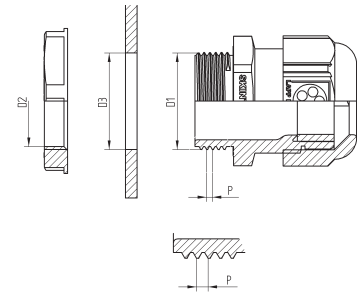


## Thread and hole dimensions – technical data for installation

### Metric thread to EN 60423 (for screw connections to IEC 62444)

Nominal size	Ø D1	P	Ø D2	Hole Ø D3
M6 x 1	6	1	5.2	6.0 + 0.2
M8 x 1	8	1	7.1	8.0 + 0.2
M10 x 1	10	1	9.1	10.0 + 0.2
M12 x 1.5	12	1.5	10.6	12.0 + 0.2
M16 x 1.5	16	1.5	14.6	16.0 + 0.2
M20 x 1.5	20	1.5	18.6	20.0 + 0.2
M25 x 1.5	25	1.5	23.6	25.0 + 0.2
M32 x 1.5	32	1.5	30.6	32.0 + 0.3
M40 x 1.5	40	1.5	38.6	40.0 + 0.3
M50 x 1.5	50	1.5	48.6	50.0 + 0.4
M63 x 1.5	63	1.5	61.6	63.0 + 0.4
M75 x 1.5	75	1.5	73.6	75.0 + 0.5
M90 x 2	90	2	88.8	90.0 + 0.5
M110 x 2	110	2	108.8	110.0 + 0.5



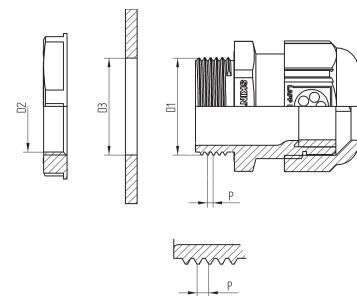
D1 = External-Ø  
 D2 = Core Ø internal thread  
 D3 = Hole Ø  
 P = Pitch

### Metric thread to DIN 13 part 6 and 7 (for screw connections to DIN 89 280)

Nominal size	Ø D1	P	Ø D2	Hole Ø D3
M18 x 1.5	18	1.5	16.4	18.3 - 0.2
M24 x 1.5	24	1.5	22.4	24.3 - 0.2
M30 x 2	30	2	27.8	30.3 - 0.2
M36 x 2	36	2	33.8	36.3 - 0.2
M45 x 2	45	2	42.8	45.4 - 0.3
M56 x 2	56	2	53.8	56.4 - 0.3
M72 x 2	72	2	69.8	72.5 - 0.4
M80 x 2	80	2	77.8	80.5 - 0.4
M105 x 2	105	2	102.8	105.5 - 0.4

### PG thread to DIN 40430

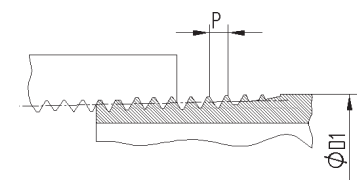
Nominal size	Ø D1	P	Ø D2	Hole Ø D3
PG 7	12.5	1.27	11.3	12.8 - 0.2
PG 9	15.2	1.41	13.9	15.5 - 0.2
PG 11	18.6	1.41	17.3	18.9 - 0.2
PG 13.5	20.4	1.41	19.1	20.7 - 0.2
PG 16	22.5	1.41	21.2	22.8 - 0.2
PG 21	28.3	1.588	26.8	28.6 - 0.2
PG 29	37.0	1.588	35.5	37.4 - 0.3
PG 36	47.0	1.588	45.5	47.4 - 0.3
PG 42	54.0	1.588	52.5	54.4 - 0.3
PG 48	59.3	1.588	57.8	59.7 - 0.3



D1 = External-Ø  
 D2 = Core Ø internal thread  
 D3 = Hole Ø  
 P = Pitch

### NPT thread to ANSI B1.20.2

Nominal size	Ø D1	P	Hole Ø D3
NPT 1/4"	13.7	1.41	14.1 - 0.2
NPT 3/8"	17.1	1.41	17.4 - 0.2
NPT 1/2"	21.3	1.81	21.6 - 0.2
NPT 3/4"	26.7	1.81	27.0 - 0.2
NPT 1"	33.4	2.21	33.7 - 0.2
NPT 1 1/4"	42.2	2.21	42.5 - 0.2
NPT 1 1/2"	48.3	2.21	48.7 - 0.2
NPT 2"	60.3	2.21	60.7 - 0.2



D1 = External-Ø  
 D3 = Hole Ø  
 P = Pitch

### Tightening torques\* for SKINTOP® metric cable glands

Table of recommended tightening torques (domed cap nut, connection thread) for metric SKINTOP® glands to achieve ingress protection and category A strain relief according to IEC 62444. For more information regarding the protection rating, see the product page.

Nominal size	Tightening torque in Nm	
	Plastic	Metal
M6 x 1	-	1.5
M8 x 1	-	3
M10 x 1	-	6
M12 x 1.5	1.5	8
M16 x 1.5	3.0	10
M20 x 1.5	6.0	12
M25 x 1.5	8.0	12
M32 x 1.5	10.0	18
M40 x 1.5	13.0	18
M50 x 1.5	15.0	20
M63 x 1.5	16.0	20
M63 x 1.5 plus	-	25
M75 x 1.5	-	30
M90 x 2	-	45
M110 x 2	-	55

\*NOTE: The values in the table above constitute the tightening torques for fittings and the maximum tightening torques for domed cap nuts under normal climatic conditions. Note that lower torques must be used with different cable insulation materials; otherwise, the cable insulation may be damaged. For ATEX screw connections, see the corresponding operating instructions for the respective tightening torques (operating instructions can be found in the delivery bag).

### Tightening torques\* for SKINTOP® PG cable glands

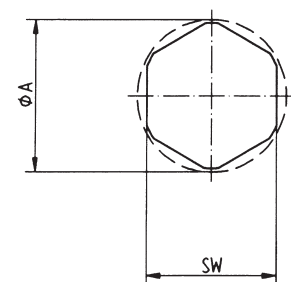
Nominal size	Tightening torques for fittings in Nm		Tightening torques for domed cap nuts in Nm	
	Plastic	Metal	Plastic	Metal
PG 7	3.0	6.25	1.7	6.25
PG 9	4.0	6.25	2.5	6.25
PG 11	4.0	6.25	2.5	6.25
PG 13.5	4.0	6.25	2.5	6.25
PG 16	6.0	7.5	3.3	7.5
PG 21	8.0	10.0	5.0	10.0
PG 29	13.0	10.0	5.0	10.0
PG 36	13.0	10.0	5.0	10.0
PG 42	13.0	10.0	5.0	10.0
PG 48	13.0	10.0	5.0	10.0

\*NOTE: The values in the table above constitute the tightening torques for fittings and the maximum tightening torques for domed cap nuts under normal climatic conditions. Note that lower torques must be used with different cable insulation materials; otherwise, the cable insulation may be damaged. For ATEX screw connections, see the corresponding operating instructions for the respective tightening torques (operating instructions can be found in the delivery bag).

### Installation dimensions and wrench sizes for cable glands

Diameter A indicates the installation space required for the relevant hexagon. This diameter corresponds to the width of the hexagon across corners plus an installation tolerance.

SW	Ø A	SW	Ø A	SW	Ø A	SW	Ø A
9	10.4	22	25.0	37	41.5	54	61.0
11	12.5	24	27.3	39	44.0	55	62.0
13	14.9	25	28.3	40	45.2	57	64.4
14	16.0	26	29.5	41	46.1	60	67.5
15	17.1	27	30.6	42	47.0	64	72.3
16	18.2	28	31.8	45	51.2	65	73.1
17	19.4	29	32.5	45	51.2	66	74.5
18	20.4	30	34.0	46	52.5	67	74.5
19	22.0	32	36.2	47	52.5	95	105.0
20	22.7	33	37.2	50	58.3	115	127.0
21	23.9	36	40.5	53	60.0	135	150.0



Installation dimensions for multi-cable entry systems

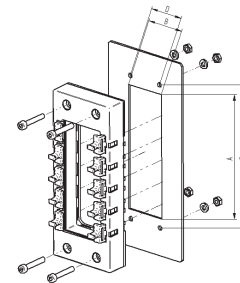
## Installation dimensions for multi-cable entry systems

The mounting measurements of the SKINTOP® multi-cable entry systems are related to the 16- and 24- pin cut-out for industrial connectors.

### Installation dimensions for SKINTOP® CUBE FRAME

Product name	A	B	C	D
SKINTOP® CUBE FRAME 16	86	36	103	32
SKINTOP® CUBE FRAME 24	113	36	130	32

SKINTOP® CUBE FRAME can be assembled with the SKINTOP® CUBE modules for use with harnessed cables. For non-harnessed cables the SKINTOP® CUBE MULTI plate can be inserted into the frame (applies only to frame size 24).



### Installation dimensions for SKINTOP® MULTI

Product name	A	B	C	D
SKINTOP® MULTI	113	36	130	32

SKINTOP® MULTI offers various versions with different entry designs for non harnessed cables, hoses and conduits.

