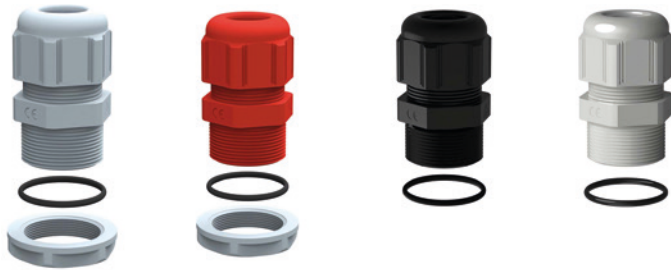


IP 68 plastic cable gland

Cat. Nos: 3 815 58 to 3 815 65, 3 815 66 to 3 815 75, 3 815 76 to 3 815 83, 3 815 84 to 3 815 93, 3 818 00 to 3 818 17, 3 815 94 à 3 815 97, 0 980 00 to 0 980 09, 0 980 20 to 0 980 29, 0 919 30 to 0 919 32, 3 865 71 to 3 865 78, 3 865 61 to 3 865 70, 3 868 81 to 3 868 88, 3 868 71 to 3 868 80, 3 866 71 to 3 866 78, 3 866 61 to 3 866 70, 0 980 41 to 0 980 47, 0 980 84 to 0 980 89



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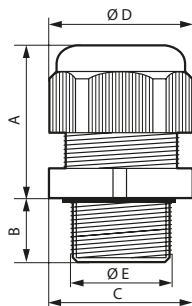
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1. DESCRIPTION

Halogen-free polyamide cable gland with mechanical clamping and anti-vibration locking, equipped with a rubber gasket, a rubber O ring seal and a polyamide locking ring to provide an IP68 protection rating. The flexible part is used for clamping and provides good load resistance, tensile and torsional strength, while the seal ensures an IP68 protection rating. Thanks to its excellent resistance to heat and fire, the cable gland is suitable for a large number of applications and installations. The cable glands are supplied with a surface seal.

2. RANGE AND DIMENSIONS

Dimensions and quantities supplied with a surface seal:



RAL 9011 cable gland

Cat. No	Thread	A	B	Ø D	C (across flat)	Ø E	Punch Ø	Pack [pcs]
3 815 58	M12x1.5	22	10	16.8	15	11.9	12.7	50
3 815 59	M16x1.5	26	10	21	19	15.9	16.2	50
3 815 60	M20x1.5	29	12	26.5	24	19.8	20.4	50
3 815 61	M25x1.5	35	15	36	33	24.8	25.4	35
3 815 62	M32x1.5	40	15	46.5	42	31.6	32.5	20
3 815 63	M40x1.5	49	17	58.5	53	39.9	40.5	10
3 815 64	M50x1.5	54	17	66.5	60	50	50.8	5
3 815 65	M63x1.5	54	18	75	68	62.9	64	5

Cat. No	Thread	A	B	Ø D	C (across flat)	Ø E	Punch Ø	Pack [pcs]
3 815 66	PG7	22	10	16.8	15	12.5	12.7	50
3 815 67	PG9	26	10	21	19	15.2	15.2	50
3 815 68	PG11	27	12	24.5	22	18.6	18.6	50
3 815 69	PG13.5	29	12	26.5	24	20.4	20.4	50
3 815 70	PG16	30	13	29.5	27	22.5	22.5	50
3 815 71	PG21	35	15	36	33	28.3	28.3	35
3 815 72	PG29	40	15	46.5	42	37	37	20
3 815 73	PG36	49	17	58.5	53	47	47	10
3 815 74	PG42	54	17	66.5	60	54	54	5
3 815 75	PG48	54	18	75	68	60	60	5

RAL 7035 cable gland

Cat. No	Thread	A	B	Ø D	C (across flat)	Ø E	Punch Ø	Pack [pcs]
3 815 76	M12x1.5	22	10	16.8	15	11.9	12.7	50
3 815 77	M16x1.5	26	10	21	19	15.9	16.2	50
3 815 78	M20x1.5	29	12	26.5	24	19.8	20.4	50
3 815 79	M25x1.5	35	15	36	33	24.8	25.4	35
3 815 80	M32x1.5	40	15	46.5	42	31.6	32.5	20
3 815 81	M40x1.5	49	17	58.5	53	39.9	40.5	10
3 815 82	M50x1.5	54	17	66.5	60	50	50.8	5
3 815 83	M63x1.5	54	18	75	68	62.9	64	5

Cat. No	Thread	A	B	Ø D	C (across flat)	Ø E	Punch Ø	Pack [pcs]
3 815 84	PG7	22	10	16.8	15	12.5	12.7	50
3 815 85	PG9	26	10	21	19	15.2	15.2	50
3 815 86	PG11	27	12	24.5	22	18.6	18.6	50
3 815 87	PG13.5	29	12	26.5	24	20.4	20.4	50
3 815 88	PG16	30	13	29.5	27	22.5	22.5	50
3 815 89	PG21	35	15	36	33	28.3	28.3	35
3 815 90	PG29	40	15	46.5	42	37	37	20
3 815 91	PG36	49	17	58.5	53	47	47	10
3 815 92	PG42	54	17	66.5	60	54	54	5
3 815 93	PG48	54	18	75	68	60	60	5

IP 68 plastic cable gland

Cat. Nos: 3 815 58 to 3 815 65, 3 815 66 to 3 815 75, 3 815 76 to 3 815 83, 3 815 84 to 3 815 93, 3 818 00 to 3 818 17, 3 815 94 à 3 815 97, 0 980 00 to 0 980 09, 0 980 20 to 0 980 29, 0 919 30 to 0 919 32, 3 865 71 to 3 865 78, 3 865 61 to 3 865 70, 3 868 81 to 3 868 88, 3 868 71 to 3 868 80, 3 866 71 to 3 866 78, 3 866 61 to 3 866 70, 0 980 41 to 0 980 47, 0 980 84 to 0 980 89

RAL 7012 cable gland

Cat. No	Thread	A	B	Ø D	C (across flat)	Ø E	Punch Ø	Pack [pcs]
3 815 94	M20x1.5	29	12	26.5	24	19.8	20.4	50

RAL 9003 cable gland

Cat. No	Thread	A	B	Ø D	C (across flat)	Ø E	Punch Ø	Pack [pcs]
3 815 95	M20x1.5	29	12	26.5	24	19.8	20.4	50

RAL 7040 cable gland

Cat. No	Thread	A	B	Ø D	C (across flat)	Ø E	Punch Ø	Pack [pcs]
3 815 96	M20x1.5	29	12	26.5	24	19.8	20.4	50

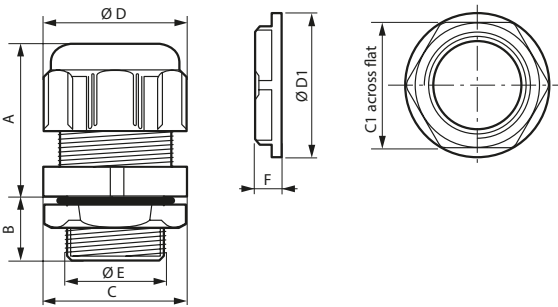
RAL 7040 cable gland

Cat. No	Thread	A	B	Ø D	C (across flat)	Ø E	Punch Ø	Pack [pcs]
3 815 97	PG16	30	13	29.5	27	22.5	22.5	50

2. RANGE AND DIMENSIONS (continued)

Dimensions and quantities of cable glands supplied with a nut and a surface seal:

* 318xx cable glands are delivered disassembled.



RAL 7001 cable gland

Cat. No	Thread	A	B	Ø D	C (across flat)	Ø E	Punch Ø	C1	F	Ø D1	Pack [pcs]
0 980 00 / 3 818 00	M12x1.5	22	10	16.8	15	11.9	12.7	19	5	21	50

Cat. No	Thread	A	B	Ø D	C (across flat)	Ø E	Punch Ø	C1	F	Ø D1	Pack [pcs]
0 980 01 / 3 818 01	M16x1.5	26	10	21	19	15.9	16.2	22	5	24	50
0 980 03 / 3 818 02	M20x1.5	29	12	26.5	24	19.8	20.4	26	6	28	50
0 980 05 / 3 818 03	M25x1.5	35	15	36	33	24.8	25.4	32	6	35	35
0 980 06 / 3 818 04	M32x1.5	40	15	46.5	42	31.6	32.5	42	7	43	20
0 980 07 / 3 818 05	M40x1.5	49	17	58.5	53	39.9	40.5	50	7	56	10
0 980 08 / 3 818 06	M50x1.5	54	17	66.5	60	50	50.8	60	8	66	5
0 980 09 / 3 818 07	M63x1.5	54	18	75	68	62.9	64	75	8	82	5

Cat. No	Thread	A	B	Ø D	C (across flat)	Ø E	Punch Ø	C1	F	Ø D1	Pack [pcs]
0 980 20 / 3 818 08	PG 7	22	10	16.8	15	12.5	12.7	19	5	21	25
0 980 21 / 3 818 09	PG 9	26	10	21	19	15.2	15.2	22	5	24	25
0 980 22 / 3 818 10	PG 11	27	12	24.5	22	18.6	18.6	24	5	26	25
0 980 23 / 3 818 11	PG 13.5	29	12	26.5	24	20.4	20.4	26	6	28	25
0 980 24 / 3 818 12	PG 16	30	13	29.5	27	22.5	22.5	30	6	32	20
0 980 25 / 3 818 13	PG 21	35	15	36	33	28.3	28.3	36	7	38	10
0 980 26 / 3 818 14	PG 29	40	15	46.5	42	37	37	46	7	51	5
0 980 27 / 3 818 15	PG 36	49	17	58.5	53	47	47	60	8	66	3
0 980 28 / 3 818 16	PG 42	54	17	66.5	60	54	54	70	8	78	2
0 980 29 / 3 818 17	PG 48	54	18	75	68	60	60	75	8	82	2

RAL 3000 cable gland

Cat. No	Thread	A	B	Ø D	C (across flat)	Ø E	Punch Ø	C1	F	Ø D1	Pack [pcs]
0 919 30	M16x1.5	26	10	21	19	15.9	16.2	22	5	24	25
0 919 31	M20x1.5	29	12	26.5	24	19.8	20.4	26	6	28	25
0 919 32	M25x1.5	35	15	36	33	24.8	25.4	32	6	35	10

3. TECHNICAL CHARACTERISTICS

3.1 Structure

Self-extinguishing:

- RAL 7012 - RAL 7040 - RAL 9003 - RAL 7035 - RAL 7001 - RAL 9011

850 °C according to standard IEC 60695-2-11

- RAL 3000 960°C according to standard IEC 60695-2-11

3.2 Protection classes

- IP68 to 1 m depth for 2 hrs

1st digit: protection against solid bodies			1st digit: protection against liquids			Additional letter: protection against direct contact resulting from access to hazardous parts		
IP	Tests	Protection	IP	Tests	Protection	IP	Tests	Protection
0		No protection	0		No protection			
1	Ø 50 mm	Protected against solid bodies larger than 50 mm	1		Protected against vertically-falling drops of water (condensation)	A	Ø 50 mm	The back of the hand remains remote from dangerous parts
2	Ø 12.5 mm	Protected against solid bodies larger than 12.5 mm	2		Protected against drops of water falling at up to 15° from the vertical	B	12 mm	The dangerous parts cannot be touched when introducing a finger
3	Ø 2.5 mm	Protected against solid bodies larger than 2.5 mm	3		Protected against drops of rain water at up to 60° from the vertical	C	2.5 mm	The dangerous parts cannot be touched when introducing a tool (eg a screwdriver)
4	Ø 1 mm	Protected against solid bodies larger than 1 mm	4		Protected against projections of water from all directions	D	1 mm	The dangerous parts cannot be touched when introducing a wire
5		Protected against dust (no harmful deposits)	5		Protected against jets of water from all directions			
6		Completely protected against dust	6		Completely protected against jets of water of similar force to heavy seas			
			7		Protected against the effects of immersion			
			8		Protected against the effects of prolonged immersion under defined conditions			
			9		Protected against high pressure and temperature water jets			
			9K ⁽¹⁾					

IP 68 plastic cable gland

Cat. Nos: 3 815 58 to 3 815 65, 3 815 66 to 3 815 75, 3 815 76 to 3 815 83, 3 815 84 to 3 815 93, 3 818 00 to 3 818 17, 3 815 94 à 3 815 97, 0 980 00 to 0 980 09, 0 980 20 to 0 980 29, 0 919 30 to 0 919 32, 3 865 71 to 3 865 78, 3 865 61 to 3 865 70, 3 868 81 to 3 868 88, 3 868 71 to 3 868 80, 3 866 71 to 3 866 78, 3 866 61 to 3 866 70, 0 980 41 to 0 980 47, 0 980 84 to 0 980 89

3. TECHNICAL CHARACTERISTICS (continued)

3.3 Mechanical characteristics

- Cable anchor test: Type A according to standard EN 62444
- Cable clamping capacities, torque value and impact resistance.

Cable glands supplied with a nut and a surface seal:

RAL 7001 cable gland

Cat. No	Thread	Clamping capacity (mm)		Tightening torque [Nm]		Impact resistance Cat.
		Min.	Max.	Nut	Body	
0 980 00 / 3 818 00	M12	4.0	6.0	1.0	1.8	2
0 980 01 / 3 818 01	M16	4.0	8.0	1.2	3.2	2
0 980 03 / 3 818 02	M20	8.0	12.0	2.0	2.6/5	4
0 980 05 / 3 818 03	M25	13.0	18.0	2.6	9.2/5.3	4
0 980 06 / 3 818 04	M32	19.0	25.0	2.6	21.1/9.2	4
0 980 07 / 3 818 05	M40	22.0	32.0	2.6	12.5/9.2	5
0 980 08 / 3 818 06	M50	30.0	35.0	2.6	11.8/10.5	5
0 980 09 / 3 818 07	M63	34.0	44.0	2.6	17.1/16.4	5

Cat. No	Thread	Clamping capacity (mm)		Tightening torque [Nm]		Impact resistance Cat.
		Min.	Max.	Nut	Body	
0 980 20 / 3 818 08	PG7	3.0	8.0	1.8	1.2	4
0 980 21 / 3 818 09	PG9	5.0	8.5	4.2	2.5	4
0 980 22 / 3 818 10	PG11	6.0	10.0	5.5	4.5	4
0 980 23 / 3 818 11	PG13.5	8.0	12.0	6.0	5.0	4
0 980 24 / 3 818 12	PG16	10.0	14.0	6.0	5.5	5
0 980 25 / 3 818 13	PG21	12.0	18.0	9.0	7.0	5
0 980 26 / 3 818 14	PG29	18.0	25.0	14.0	10.0	5
0 980 27 / 3 818 15	PG36	22.0	32.0	15.3	12.5	6
0 980 28 / 3 818 16	PG42	30.0	38.0	15.3	12.5	6
0 980 29 / 3 818 17	PG48	34.0	44.0	15.3	12.5	6

RAL 3000 cable gland

Cat. No	Thread	Clamping capacity (mm)		Tightening torque [Nm]		Impact resistance Cat.
		Min.	Max.	Nut	Body	
0 919 30	M16	4.0	8.0	1.2	3.2	2
0 919 31	M20	8.0	12.0	2.0	2.6/5	4
0 919 32	M25	13.0	18.0	2.6	9.2/5.3	4

Cable glands supplied with a surface seal:

RAL 7035 cable gland

Cat. No	Thread	Clamping capacity (mm)		Tightening torque [Nm]		Impact resistance Cat.
		Min.	Max.	Nut	Body	
3 815 76	M12	4.0	6.0	1.0	1.8	2
3 815 77	M16	4.0	8.0	1.2	3.2	2
3 815 78	M20	8.0	12.0	2.0	2.6/5	4
3 815 79	M25	13.0	18.0	2.6	9.2/5.3	4
3 815 80	M32	19.0	25.0	2.6	21.1/9.2	4
3 815 81	M40	22.0	32.0	2.6	12.5/9.2	5
3 815 82	M50	30.0	35.0	2.6	11.8/10.5	5
3 815 83	M63	34.0	44.0	2.6	17.1/16.4	5

Cat. No	Thread	Clamping capacity (mm)		Tightening torque [Nm]		Impact resistance Cat.
		Min.	Max.	Nut	Body	
3 815 84	PG7	3.0	8.0	1.8	1.2	4
3 815 85	PG9	5.0	8.5	4.2	2.5	4
3 815 86	PG11	6.0	10.0	5.5	4.5	4
3 815 87	PG13.5	8.0	12.0	6.0	5.0	4
3 815 88	PG16	10.0	14.0	6.0	5.5	5
3 815 89	PG21	12.0	18.0	9.0	7.0	5
3 815 90	PG29	18.0	25.0	14.0	10.0	5
3 815 91	PG36	22.0	32.0	15.3	12.5	6
3 815 92	PG42	30.0	38.0	15.3	12.5	6
3 815 93	PG48	34.0	44.0	15.3	12.5	6

RAL 9011 cable gland

Cat. No	Thread	Clamping capacity (mm)		Tightening torque [Nm]		Impact resistance Cat.
		Min.	Max.	Nut	Body	
3 815 58	M12	4.0	6.0	1.0	1.8	2
3 815 59	M16	4.0	8.0	1.2	3.2	2
3 815 60	M20	8.0	12.0	2.0	2.6/5	4
3 815 61	M25	13.0	18.0	2.6	9.2/5.3	4
3 815 62	M32	19.0	25.0	2.6	21.1/9.2	4
3 815 63	M40	22.0	32.0	2.6	12.5/9.2	5
3 815 64	M50	30.0	35.0	2.6	11.8/10.5	5
3 815 65	M63	34.0	44.0	2.6	17.1/16.4	5

Cat. No	Thread	Clamping capacity (mm)		Tightening torque [Nm]		Impact resistance Cat.
		Min.	Max.	Nut	Body	
3 815 66	PG7	3.0	8.0	1.8	1.2	4
3 815 67	PG9	5.0	8.5	4.2	2.5	4
3 815 68	PG11	6.0	10.0	5.5	4.5	4
3 815 69	PG13.5	8.0	12.0	6.0	5.0	4
3 815 70	PG16	10.0	14.0	6.0	5.5	5
3 815 71	PG21	12.0	18.0	9.0	7.0	5
3 815 72	PG29	18.0	25.0	14.0	10.0	5
3 815 73	PG36	22.0	32.0	15.3	12.5	6
3 815 74	PG42	30.0	38.0	15.3	12.5	6
3 815 75	PG48	34.0	44.0	15.3	12.5	6

RAL 7012 cable gland

Cat. No	Thread	Clamping capacity (mm)		Tightening torque [Nm]		Impact resistance Cat.
		Min.	Max.	Nut	Body	
3 815 94	M20	8.0	12.0	2.0	2.6/5	4

IP 68 plastic cable gland

Cat. Nos: 3 815 58 to 3 815 65, 3 815 66 to 3 815 75, 3 815 76 to 3 815 83, 3 815 84 to 3 815 93, 3 818 00 to 3 818 17, 3 815 94 à 3 815 97, 0 980 00 to 0 980 09, 0 980 20 to 0 980 29, 0 919 30 to 0 919 32, 3 865 71 to 3 865 78, 3 865 61 to 3 865 70, 3 868 81 to 3 868 88, 3 868 71 to 3 868 80, 3 866 71 to 3 866 78, 3 866 61 to 3 866 70, 0 980 41 to 0 980 47, 0 980 84 to 0 980 89

RAL 9003 cable gland

Cat. No	Thread	Clamping capacity (mm)		Tightening torque [Nm]		Impact resistance Cat.
		Min.	Max.	Nut	Body	
3 815 95	M20	8.0	12.0	2.0	2.6/5	4

RAL 7040 cable gland

Cat. No	Thread	Clamping capacity (mm)		Tightening torque [Nm]		Impact resistance Cat.
		Min.	Max.	Nut	Body	
3 815 96	M20	8.0	12.0	2.0	2.6/5	4

RAL 7040 cable gland

Cat. No	Thread	Clamping capacity (mm)		Tightening torque [Nm]		Impact resistance Cat.
		Min.	Max.	Nut	Body	
3 815 97	PG16	10.0	14.0	6.0	5.5	5

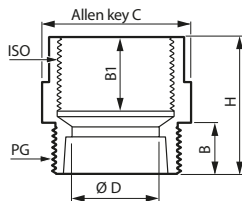
4. ACCESSORIES

4.1 PG/ISO RAL 7001 adaptors

Used to mount a cable gland or an ISO plug in a PG drill hole or threaded pitch

Supplied with surface seal fitted to preserve the IP rating
- Polyamide

Dimensions (mm)



Cat. No	Thread		Ø C	B1	B	Ø D	H
	Male PG	Female ISO					
0 980 84	PG 9	ISO 16	19	9	7	9	19.5
0 980 85	PG 11	ISO 16	22	9	8	9	20
0 980 86	PG 11	ISO 20	24	10	8	12.5	22
0 980 87	PG 13.5	ISO 20	24	10	9	12.5	22
0 980 88	PG 16	ISO 20	27	10	9	12.5	22
0 980 89	PG 16	ISO 25	32	14	9	18	27.5

4.2 RAL 7001 plugs

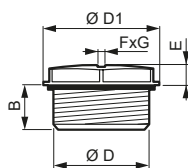
Hexagonal with base guaranteeing the enclosure IP rating up to IP 68

Can be tightened using a flat screwdriver

Supplied with surface seal

- Polyamide

Dimensions (mm)



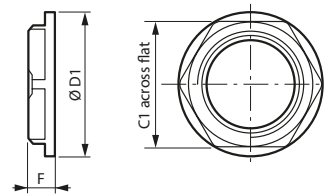
Cat. No	Thread	Ø D	D1	F x G	B	E
0 980 41	ISO 16	15.8	20.5	8 x 2	12	3.9
0 980 43	ISO 20	19.8	25	8 x 2	12	3.8
0 980 45	ISO 25	24.8	30.5	8 x 2	12	4.4
0 980 46	ISO 32	31.8	38	8 x 2	12	4.9
0 980 47	ISO 40	39.8	46.5	8 x 2	12.5	4.9

4. ACCESSORIES (continued)

4.3 RAL 9011 and RAL 7035 nuts

- Fibreglass-reinforced polyamide

Dimensions (mm)



ISO

Cat. No	Thread	C1 (across flat)	F	Ø D1
3 866 71/3 868 81	ISO 12	17	5	19
3 866 72/3 868 82	ISO 16	22	5	24
3 866 73/3 868 83	ISO 20	26	6	28
3 866 74/3 868 84	ISO 25	30	6	32
3 866 75/3 868 85	ISO 32	42	7	46
3 866 76/3 868 86	ISO 40	50	7	56
3 866 77/3 868 87	ISO 50	60	8	66
3 866 78/3 868 88	ISO 63	75	8	81

PG

Cat. No	Thread	C1 (across flat)	F	Ø D1
3 866 61/3 868 71	PG 7	19	5	21
3 866 62/3 868 72	PG 9	22	5	24
3 866 63/3 868 73	PG 11	24	5	26
3 866 64/3 868 74	PG 13.5	26	6	28
3 866 65/3 868 75	PG 16	32	6	35
3 866 66/3 868 76	PG 21	36	7	38
3 866 67/3 868 77	PG 29	46	7	51
3 866 68/3 868 78	PG 36	60	8	66
3 866 69/3 868 79	PG 42	70/64	8	78/72
3 866 70/3 868 80	PG 48	75/69	8	82/77

COMPLIANCE AND APPROVALS

- EN 62444 Cable glands for electrical installations

- EN 60695-2-11

- IEC 60529

