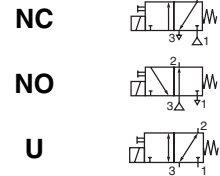


MINI-SOLENOID VALVES

ISO 15218 (CNOMO, size 15) interface
direct operated, pad mounting body
connector size 15



3/2
Series
302

FEATURES

- **Low power consumption (0,5 W)**
- Compact, monobloc solenoid pilot valve with spade-plug connector type DIN 43650, industry standard B, with 9,4 mm spacing, or to ISO 15217/DIN 43650 form C, with 8 mm spacing
- Version with or without integral LED and electrical protection. LED indicator visible from 3 sides
- Universal version for vacuum operation
- The solenoid valves satisfy all relevant EC directives

GENERAL

Differential pressure See «SPECIFICATIONS» [1 bar = 100 kPa]
Pneumatic base ISO 15218 (CNOMO E06.36.120N, size 15)
Connection Subbase
Response time 8 - 15 ms

fluids (*)	temperature range (TS)	seal materials (*)
air or inert gas filtered at 50 µm, lubricated or not	- 10°C to + 50°C (LP1) ⁽¹⁾	NBR (nitrile) FPM (fluoroelastomer)
	- 25°C to + 60°C (LP2) ⁽¹⁾	
	- 25°C to + 60°C / +50°C (LP3) ⁽¹⁾	

⁽¹⁾ LP1, LP2, LP3: see "electrical characteristics" table

MATERIALS IN CONTACT WITH FLUID

(*) Ensure that the compatibility of the fluids in contact with the materials is verified

Body PAA
Internal parts POM, PET, stainless steel and brass
Seals NBR (disc), FPM (others)
Pneumatic interface seal TPE

OTHER MATERIALS

Coil Thermoplastic PET

ELECTRICAL CHARACTERISTICS

Coil insulation class F
Connector Spade plug (cable Ø 4-6 mm)
Connector specification DIN 43650, 9,4 mm, industry standard B or ISO 15217 / DIN 43650, 8 mm, form C IEC 335
Electrical safety Moulded IP65 (EN 60529)
Electrical enclosure protection DC (=) : 12V - 24V
Standard voltages AC (-) : 24V - 115V - 230V / 50-60 Hz
 (Other voltages on request)

power ranges	coils		power ratings (⇄)				operator ambient temperature range ⁽⁴⁾ (TS) (°C)	type ⁽²⁾
	voltages (V)		inrush ~	holding ~	hot/cold =			
	~	=	(VA)	(VA)	(W)	(W)		
LP1	-	24	-	-	-	0,5 / 0,55	-10 to + 50	01
LP2	24-115	12-24	1,4	1,2	1,1	1 / 1,2	-25 to + 60	
LP3	230	24	2,1	1,6	1,5	2 / 2,65	-25 to +60 (-)/+50 (=) ⁽³⁾	

⁽²⁾ Refer to the dimensional drawings on the following page..

⁽³⁾ With LED, see page 6

⁽⁴⁾ For joinable subbase mounting, see page 6.

SPECIFICATIONS (NO and U, following page)

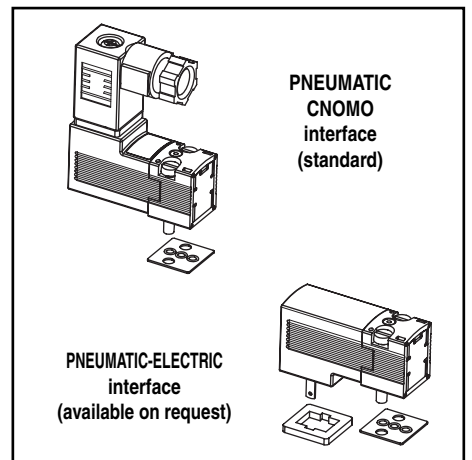
orifice size (mm)	flow				operating pressure differential (bar)		power ranges	basic catalogue number			
	at 6 bar l/min (ANR)		coefficient Kv		min.	max. (PS)		manual operator		maintained	
	1 → 2	2 → 3	1 → 2	2 → 3				impulse ~	manual operator =	maintained ~	maintained =
NC - Normally closed											
0,6	11	20	0,11	0,26	0	8	LP1	-	3021X106	-	3021X107
					0	10	LP2	3021X109	3021X109	3021X110	3021X110
0,8	17	28	0,22	0,35	0	8	LP2	3021X112	3021X112	3021X113	3021X113
					0	5	LP2	3021X118	3021X118	3021X119	3021X119
1,1	32	51	0,35	0,50	0	10	LP3	3021X121	3021X121	3021X122	3021X122
					0	3	LP2	3021X124	3021X124	3021X125	3021X125
1,5	39	53	0,50	0,56	0	6	LP3	3021X127	3021X127	3021X128	3021X128
					0	6	LP3	3021X127	3021X127	3021X128	3021X128

When ordering, please specify in addition to the basic catalogue number:

- the type of current: voltage / frequency
- the version: with or without connector

	~	=	} to be inserted after the basic catalogue number
with connector	--A	--D	
without connector	--L	--P	

Examples: • with connector 24V DC : **30211109--D** 24V DC
 • without connector 24V DC : **30210109--P** 24V DC



(⇄) Nominal power ratings of versions without LED indicator and electrical protection.

For versions with LED indicator and electrical protection, add:
 0,15 W with DC (=)
 0,4 W / VA with AC (-)

X	
0	connection ISO 15217/DIN 43650, 8 mm, form C
1	connection DIN 43650, 9,4 mm, industry standard B
4	connection ISO 15217/DIN 43650, 8 mm, form C + LED and protection ⁽⁵⁾
5	connection DIN 43650, 9,4 mm, industry standard B + LED and protection ⁽⁵⁾

⁽⁵⁾ Only available in 24 V AC/DC and 115 V AC.

SPECIFICATIONS: NO, U, Uv

orifice size (mm)	flow				operating pressure differential (bar)		power ranges	basic catalogue number			
	at 6 bar l/min (ANR)		coefficient Kv		min.	max. (PS)		manual operator			
	1 → 2	2 → 3	1 → 2	2 → 3				impulse		maintained	
	1 → 2	2 → 3	1 → 2	2 → 3				~	=	~	=
NO - Normally open											
0,8	20	17	0,26	0,20	0	8	LP2	3021X130		3021X131	
					0	10	LP3	3021X133		3021X134	
1	28	32	0,35	0,35	0	5	LP2	3021X136		3021X137	
					0	8	LP3	3021X139		3021X140	
1,5	53	39	0,56	0,50	0	2	LP2	3021X142		3021X143	
					0	6	LP3	3021X145		3021X146	
U - universal											
	1 ↔ 2	2 ↔ 3	1 ↔ 2	2 ↔ 3							
0,8	17	20	0,20	0,26	0	6	LP2	3021X148		3021X149	
					0	8	LP3	3021X151		3021X152	
1	32	28	0,35	0,35	0	2,5	LP2	3021X154		3021X155	
					0	5	LP3	3021X157		3021X158	
1,5	39	53	0,50	0,56	0	1	LP2	3021X160		3021X161	
					0	2	LP3	3021X163		3021X164	
Uv - universal vacuum											
1,5	39	53	0,73	0,93	-0,950	0	LP2	3021X166		3021X167	

When ordering, please specify in addition to the basic catalogue number:

- the type of current: voltage / frequency
- the version: with or without connector

	~	=	} to be inserted after the basic catalogue number
with connector	--A	--D	
without connector	--L	--P	

Examples: • with connector 24V DC : **30211109--D** 24V DC
 • without connector 24V DC : **30210109--P** 24V DC

X	
0	connection ISO 15217/DIN 43650, 8 mm, form C
1	connection DIN 43650, 9,4 mm, industry standard B
4	connection ISO 15217/DIN 43650, 8 mm, form C + LED and protection ⁽⁵⁾
5	connection DIN 43650, 9,4 mm, industry standard B + LED and protection ⁽⁵⁾

⁽⁵⁾ Only available in 24 V AC/DC and 115 V AC.

OPTIONS AND ACCESSORIES

- Seals and disc made of FPM (fluoroelastomer)
- Version without manual operator
- Version with pneumatic-electric interface
- Connector ISO 15217 / DIN 43650, 8 mm, form C:
 - standard: catalogue number **88130211**
 - with cable 2 m length: catalogue number **88130214**
- Connector DIN 43650, 9,4 mm, industry standard B:
 - standard: catalogue number **88143581**
 - with cable 2 m length: catalogue number **88143567**
- Explosionproof enclosures for use in zones 0/20-1/21-2/22, categories 1-2-3 to ATEX Directive 94/9/EC (see "Explosionproof solenoids" section)

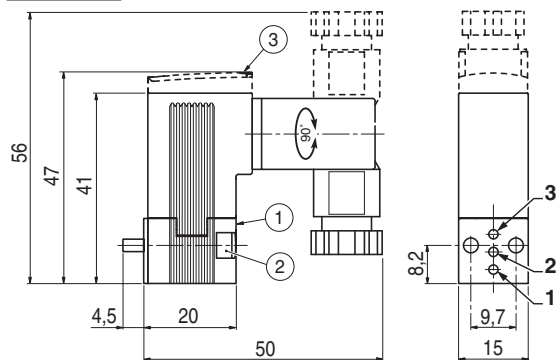
INSTALLATION

- The solenoid valves can be mounted in any position without affecting operation
- Solenoid valve supplied with mounting screws and mounting pad seal(s)
- Installation/maintenance instructions are included with each valve

DIMENSIONS (mm), WEIGHT (kg)



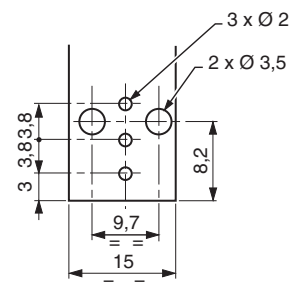
TYPE 01
Epoxy moulded
IEC 335 / DIN 43650
IP65



function	connection			
	1	2	3	
universal	NC	P	O	E
	NO	E	O	P
universal	MIX	P2	O	P1
	SEL	O 2	P	O 1
universal vacuum	V-NC	V	O	E
	V-NO	E	O	V

P: Pressure O: Outlet
E: Exhaust V: Vacuum

Subbase mounting surface: ISO 15218
(CNOMO E06.36.120N, size 15)



- ① Manual operator location
- ② 2 mounting screw M3 x 20
- ③ Version with LED and electrical protection

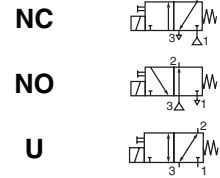
weight ⁽¹⁾
0,047

⁽¹⁾ with standard connector.

All leaflets are available on: www.asconumatics.eu

MINI-SOLENOID VALVES

ISO 15218 (CNOMO, size 15) interface
direct operated, pad mounting body
connection M12 or with cable ends



3/2
Series
302

FEATURES

- **Low power consumption (0,65 W)**
- **Compact, monobloc solenoid pilot valve with M12 connector or cable ends**
- **Version with integral LED indicator and electrical protection.**
LED indicator visible from 3 sides
- **Universal version for vacuum operation**
- **The solenoid valves satisfy all relevant EC directives**

GENERAL

Differential pressure See «SPECIFICATIONS» [1 bar = 100 kPa]
Pneumatic base ISO 15218 (CNOMO E06.36.120N, size 15)
Connection Subbase
Response time 8 - 15 ms

fluids (*)	temperature range (TS)	seal materials (*)
air or inert gas	- 10°C to + 50°C (LP1) ⁽¹⁾	NBR (nitrile)
filtered at 50 µm, lubricated or not	- 25°C to + 60°C (LP2) ⁽¹⁾	FPM (fluoroelastomer)

⁽¹⁾ LP1, LP2: see "electrical characteristics" table

MATERIALS IN CONTACT WITH FLUID

(*) Ensure that the compatibility of the fluids in contact with the materials is verified

Body PAA
Internal parts POM, PET, stainless steel and brass
Pneumatic interface seal TPE

OTHER MATERIALS

Coil Thermoplastic PET

ELECTRICAL CHARACTERISTICS

Coil insulation class F
Connection Connector M12 or cable ends
Electrical safety IEC 335

connector M12 CNOMO E03.62.520.N
cable ends EN 60730

Electrical enclosure protection Moulded IP67 (EN 60529)

Standard voltages DC (=) : 24V

power ranges	coils		power ratings (↔)				operator ambient temperature range ⁽³⁾ (TS) (°C)	type ⁽²⁾
	voltages (V)		inrush ~	holding ~	hot/cold =			
	~	=	(VA)	(VA)	(W)	(W)		
LP1	-	24	-	-	-	0,65 / 0,7	-10 to + 50	01-02
LP2	-	24	-	-	-	1,15 / 1,35	-25 to + 60	

⁽²⁾ Refer to the dimensional drawings on the following page.

⁽³⁾ For joinable subbase mounting, see page 6.

SPECIFICATIONS

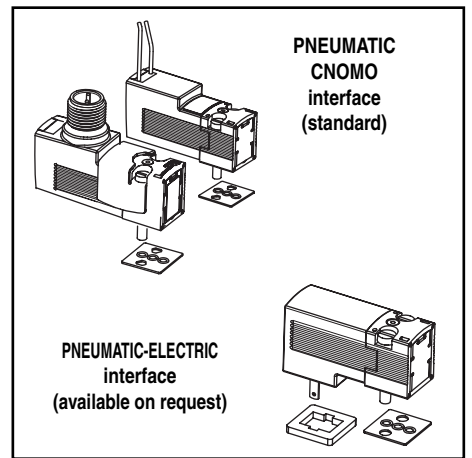
orifice size (mm)	flow				operating pressure differential (bar)		power ranges	basic catalogue number		
	at 6 bar l/min (ANR)		coefficient Kv		min.	max. (PS)		impulse	manual operator	maintained
	1 → 2	2 → 3	1 → 2	2 → 3						
NC - Normally closed										
0,6	11	20	0,11	0,26	0	8	LP1	3021X106		3021X107
					0	10	LP2	3021X109		3021X110
0,8	17	28	0,22	0,35	0	8	LP2	3021X112		3021X113
1,1	32	51	0,35	0,50	0	5	LP2	3021X118		3021X119
1,5	39	53	0,50	0,56	0	3	LP2	3021X124		3021X125
NO - Normally open										
	3 → 2	2 → 1	3 → 2	2 → 1						
0,8	20	17	0,26	0,20	0	8	LP2	3021X130		3021X131
1	32	28	0,35	0,35	0	5	LP2	3021X136		3021X137
1,5	53	39	0,56	0,50	0	2	LP2	3021X142		3021X143
U - universal										
	1 ↔ 2	2 ↔ 3	1 ↔ 2	2 ↔ 3						
0,8	17	20	0,20	0,26	0	6	LP2	3021X148		3021X149
1	32	28	0,35	0,35	0	2,5	LP2	3021X154		3021X155
1,5	39	53	0,50	0,56	0	1	LP2	3021X160		3021X161
Uv - universal vacuum										
1,5	39	53	0,73	0,93	-0,950	0	LP2	3021X166		3021X167

When ordering:

	M12	cable	
with connector	--D		} to be inserted after (the basic catalogue number
without connector	--P		
complete		--D	

X	
2	connection M12 + LED and protection
3	cable ends + LED and protection

Examples: • M12 without connector : **30212106--P**
• cable ends : **30213109--D**



(↔) Nominal power ratings of standard versions (with LED indicator and electrical protection)

OPTIONS AND ACCESSORIES

- Seals and disc made of FPM (fluoroelastomer)
- Version without manual operator
- Version with pneumatic-electric interface
- Straight M12 connector:
 - cable entry Ø4 to 6mm: catalogue number **88100304** (mounting only on single subbase)
 - with cable 2 m length: catalogue number **88100726**
 - with 5 m cable length: catalogue number **88130212**
- Explosionproof enclosures for use in zones 0/20-1/21-2/22, categories 1-2-3 to ATEX Directive 94/9/EC (see "Explosionproof solenoids" section)

INSTALLATION

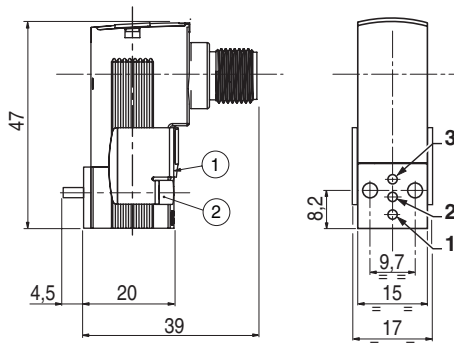
- The solenoid valves can be mounted in any position without affecting operation
- Solenoid valve supplied with mounting screws and mounting pad seal(s)
- Installation/maintenance instructions are included with each valve

DIMENSIONS (mm), WEIGHT (kg)



TYPE 01

Epoxy moulded
IEC 335 / connector M12
IP67



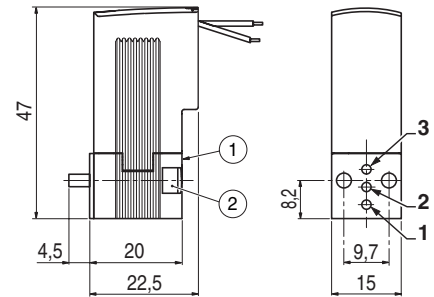
function		connection		
		1	2	3
	NC	P	O	E
	NO	E	O	P
universal	MIX	P2	O	P1
	SEL	O 2	P	O 1
universal vacuum	V-NC	V	O	E
	V-NO	E	O	V

P: Pressure
E: Exhaust
O: Outlet
V: Vacuum



TYPE 02

Epoxy moulded
IEC 335 / cable ends 0,3 m length
IP67

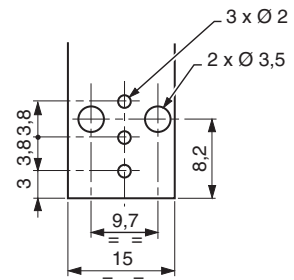


Subbase mounting surface: ISO 15218
(CNOMO E06.36.120N, size 15)

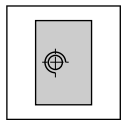
- ① Manual operator location.
- ② 2 mounting screw M3 x 20

weight	
M12 ⁽¹⁾	cable ends
0,049	0,040

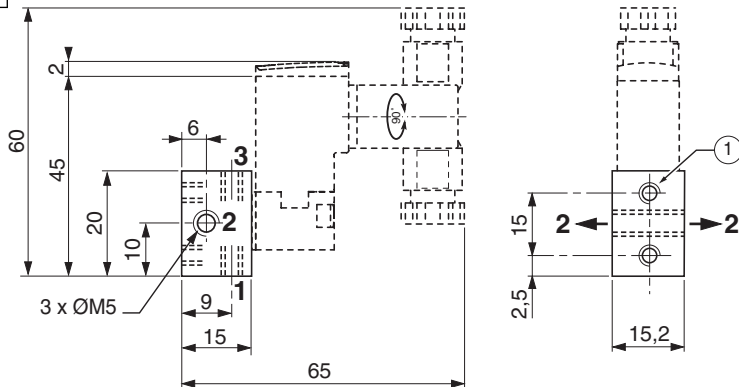
⁽¹⁾ Without connector



DIMENSIONS (mm), WEIGHT (kg)



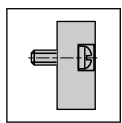
Single subbase
Aluminium or brass



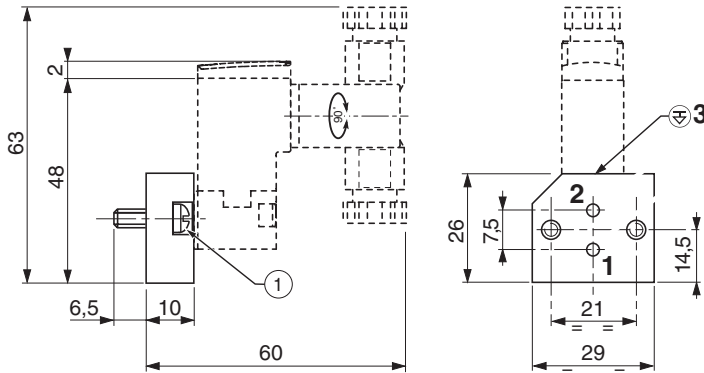
- ① Mounting: 2 holes M3, depth 4,5
Orifice (2) can be connected on the left or on the right of the subbase.

material	catalogue number	weight ⁽¹⁾
aluminium	88263002	0,011
brass	30300001	0,034

⁽¹⁾ subbase alone



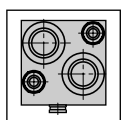
Adapter CNOMO size 30
(only for NC version)
Aluminium



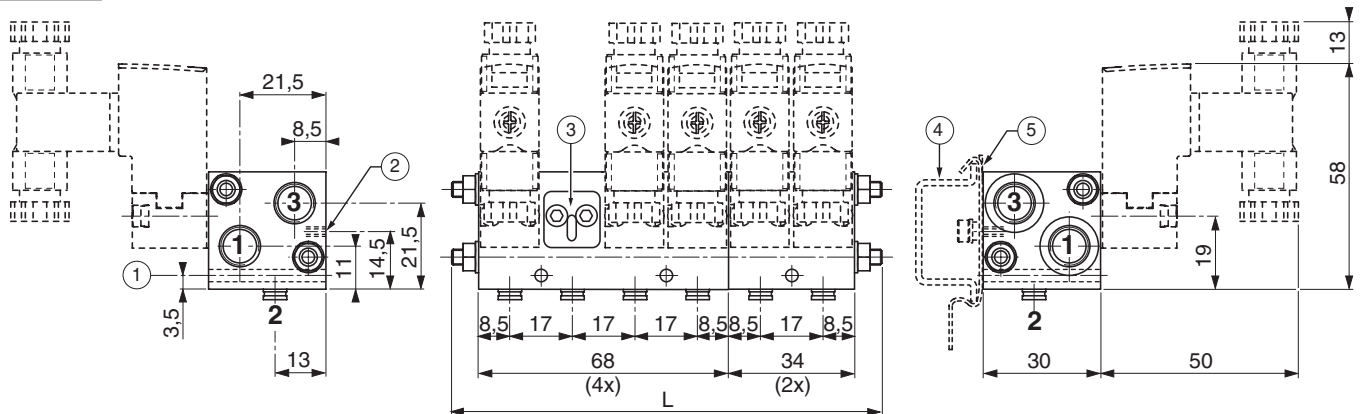
- ① Mounting: 2 screws M4 x 10 (supplied)

catalogue number	weight ⁽²⁾
88263001	0,018

⁽²⁾ adapter alone



Joinable subbases
Aluminium



Ports 1 and 3: G1/8

Port 2: coupling for 4mm OD tube

- ① Fixing hole Ø 3,2 (2 for 4x ; 1 for 2x)
② Fixing hole M3, depth 8 (2 for 4x ; 1 for 2x)
③ Mating surface blanking plates (option)
④ TS35 DIN rail (not supplied)
⑤ Clip for DIN rail mounting (option)

catalogue number	x	subbases	L	weight ⁽³⁾
35500564	2	2x	-	0,076
35500565	4	4x	-	0,148
35500566	6	4x + 2x	114	0,236
35500567	8	4x + 4x	148	0,313
35500568	10	4x + 4x + 2x	182	0,389
35500569	12	4x + 4x + 4x	216	0,466

⁽³⁾ subbases alone

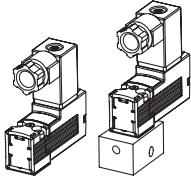
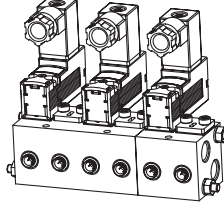
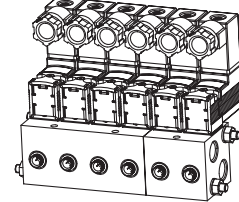
x = place for mini-solenoid valves.

2 plugs R1/8 supplied.

OPTIONS AND ACCESSORIES

- Additional subbase with 2 places (with seals): catalogue number **35500570**
- 2 tie-rods + nuts for a subbase with:
 4 places: catalogue number **88100752**
 6 places: catalogue number **88100753**
 8 places: catalogue number **88100754**
 10 places: catalogue number **88100755**
 12 places: catalogue number **88100756**
- Mounting kit for DIN rail (2 clips + screws + washers): catalogue number **88100757**
- Mating surface blanking plate: catalogue number **88130203**

AMBIENT TEMPERATURE RANGES

current type	power range	power coil		version			
		inrush/holding (VA) ~	hot/cold (W) =				
DC (=)	LP1 ⁽¹⁾	-	0,5/0,55	standard	-10°C ; +50°C	-10°C ; +50°C	-10°C ; +50°C
		-	0,65/0,7	LED + protection			
	LP2 ⁽¹⁾	-	1/1,2	standard	-25°C ; +60°C	-25°C ; +60°C	-25°C ; +40°C
		-	1,15/1,35	LED + protection			
	LP3 ⁽²⁾	-	2/2,65	standard	-25°C ; +50°C	-25°C ; +40°C	-25°C ; +40°C
		-	2,15/2,8	LED + protection			
AC (~)	LP2 ⁽²⁾	1,4/1,2	-	standard	-25°C ; +60°C	-25°C ; +40°C	-25°C ; +40°C
		1,8/1,6	-	LED + protection			
	LP3 ⁽²⁾	2,1/1,6	-	standard	-25°C ; +60°C	-25°C ; +40°C	-25°C ; +40°C
		2,5/2	-	LED + protection			

⁽¹⁾ Voltage: -15% / +20%

⁽²⁾ Voltage: -15% / +10%