Cable Glands, Plastic CG.P*DS1.* Stopping Plugs SP.PE.* Sealing Plugs BP.*

Marking

Cable Glands, Plastic CG.P*DS1.* Stopping Plugs, Plastic SP.PE.* Sealing Plugs, Plastic BP.*
ATEX certificate: IMQ 15 ATEX 006X ATEX marking: Ex II 2 GD Ex eb IIC Gb Ex tb IIIC Db
IECEx certificate: IECEx IMQ 15.0001X UKCA certificate: CML 22 UKEX 31379X INMETRO certificate CG.P*DS1.*: DNV 20.0030 X INMETRO certificate SP.PE.*: DNV 20.0032 X CCC certificate CG.P*DS1.*: 2021312313000450 CCC certificate SP.PE.*: 2021312313000455

The *-marked letters of the type code are placeholders for versions of the device.

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Internet: www.pepperl-fuchs.com

Target Group, Personnel

Responsibility for planning, assembly, commissioning, operation, maintenance, and dismounting lies with the plant operator.

The personnel must be appropriately trained and qualified in order to carry out mounting, installation, commissioning, operation, maintenance, and dismounting of the device. The trained and qualified personnel must have read and understood the instruction manual.

Reference to Further Documentation

Observe directives, standards, and national laws applicable to the intended use and the operating location.

The corresponding datasheets, manuals, declarations of conformity, EU-type examination certificates, certificates, and control drawings if applicable (see datasheet) are an integral part of this document. You can find this information under www.pepperl-fuchs.com.

For specific device information such as the year of construction, scan the QR code on the device. As an alternative, enter the serial number in the serial number search at www.pepperl-fuchs.com/device-information.

Intended Use

The device is only approved for appropriate and intended use. Ignoring these instructions will void any warranty and absolve the manufacturer from any liability.

The cable glands of the CG.P*DS1.* series are made of plastic.

The stopping plugs of the SP.PE.* series are made of plastic.

The sealing plugs of the BP.* series are made of plastic.

The device can be used indoors.

The device can be used outdoors.

The device can be used in Zone 1.

The device can be used in Zone 21.

The device can be used in Zone 2.

The device can be used in Zone 22.

The device can be used with intrinsically safe circuits.

Only use the device in fixed installations.

The cable glands can be used with non-armored elastomer and plastic insulated cables.

Variants with blue cap nuts are available for identification of intrinsically safe Ex i circuits.

Stopping plugs SP.PE.* are used to close unused cable entries of enclosures.

Sealing plugs BP.* are used to close unused cable glands.

Improper Use

Protection of personnel and the plant is not ensured if the device is not used according to its intended use.

Mounting and Installation

Observe the installation instructions according to IEC/EN 60079-14.

If you intend to install the device or enclosure in areas that may be exposed to aggressive substances, ensure that the stated surface materials are compatible with these substances. If required, contact Pepperl+Fuchs for further information.

Observe the instruction manuals for the associated components.

Refer to the corresponding technical data of the installed components for the actual type of protection or any possible restrictions.

Ensure that the degree of protection is maintained by the entire installation.

Ensure that the surface of the enclosure is smooth enough to achieve the required degree of protection.

Ensure that the enclosure entries are perpendicular, circular and free of burrs.

Requirements for Cable Glands

Only use cable glands that are suitably certified for the application.

Only use cable glands with a temperature range appropriate to the application.

Use seals that are suitable for the specified application.

Ensure that the degree of protection is not violated by the cable glands.

Install cables and cable glands in a way that they are not exposed to mechanical hazards.

The cables and connection lines must be free from mechanical stress. Use appropriate strain relief, which must be fitted outside of the enclosure.

Ensure that all cable glands are in good condition and are securely tightened.

Tighten all cable glands with the appropriate torque.

Close all unused cable glands with the appropriate sealing plugs.

Observe the specific ambient conditions of sealing plugs.

Installation Sequence

Disassemble the parts of the cable gland.

Choose the optimal seal insert combination (S*) according to the cable diameter. Use the outer seal insert S1 (4) for cables with large diameter. Use a combination of both seal inserts (3) ... (4) for cables with smaller diameter.

Fit the seal insert combination into the gland body basis (2).

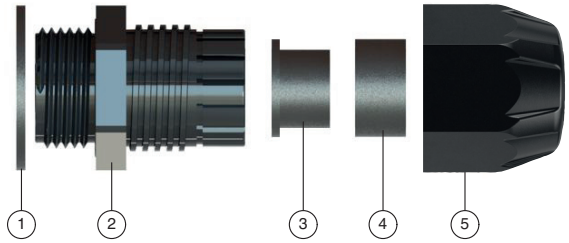
Install the gland body basis (2) in the entry of the enclosure.

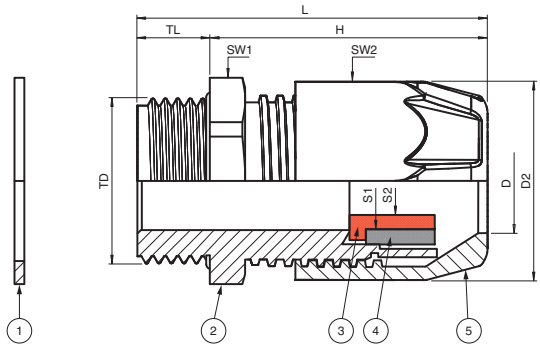
Push the cap nut (5) onto the cable.

Push the cable through the seal inserts (3) ... (4).

Tighten the cap nut (5) to the gland body basis (2). Simultaneously lock the hexagon SW1 of (2).

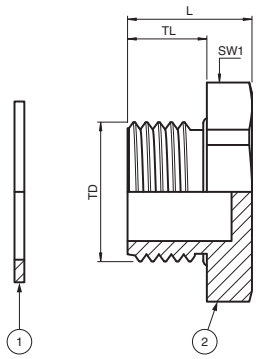
Dimensions and Assembly Cable Glands CG.P*DS1.*





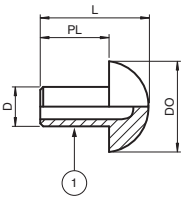
Legend	
1	Flat gasket
2	Gland body basis
3	Seal insert S2
4	Seal insert S1
5	Cap nut
D	Clamping range, cable sheath diameter
D2	Width across corners
H	Length outside enclosure
L	Total length
SW*	Width across flats
TD	Thread size
TL	Thread length

Dimensions Stopping Plugs SP.PE.*



Legend	
1	Flat gasket
2	Stopping plug
L	Total length
SW*	Width across flats
TD	Thread size
TL	Thread length

Dimensions Sealing Plugs BP.*



Legend	
1	Blanking plug
L	Total length
D	Diameter of pin
DO	Outer diameter
PL	Length of pin

Allocation of sealing plugs to cable glands please see data table below. Material polyamide, further technical information see individual datasheets.

Requirements in Relation to Increased Safety

Requirements in Relation to Non-Threaded Enclosures

The minimum wall thickness of the enclosure has to be 1.5 mm.

If the enclosure has no threads, use locknuts for tightening. A minimum of 3 thread turns of the locknut are required for tightening.

Use washer gaskets between the screw-in parts and the enclosure for sealing.

During mounting, it may be necessary to rotate the locknut or the cable gland. If it is necessary to rotate the cable gland, use an O-ring for sealing.

Adhere to the required hole diameters.

Requirements in Relation to Metric Threads

The minimum wall thickness of the enclosure has to be 1.5 mm.

When mounting on the enclosure, at least 3 thread turns has to be mechanically connected to the enclosure. If this is not possible, use a locknut.

Tighten the locknut inside and the washer gasket on the thread outside of the enclosure.

If necessary, mount an O-ring between the washer gasket and the screw head.

Operation, Maintenance, Repair

Do not use a damaged or polluted device.

Observe the installation instructions according to IEC/EN 60079-14.

Observe IEC/EN 60079-17 for maintenance and inspection.

Do not modify or manipulate the device.

Only use spare parts specified by the manufacturer.

Ensure that the device is de-energized before maintain or repair the device.

Delivery, Transport, Disposal

Check the packaging and contents for damage.

Check if you have received every item and if the items received are the ones you ordered.

The device, built-in components, packaging, and any batteries contained within must be disposed in compliance with the applicable laws and guidelines of the respective country.

Technical Data

General	
Types and variants	CG.P* - see type code table
Mechanical specifications	
Dimensions	see data tables
Cable type	non-armored cables
Clamping range (D)	see data tables
Thread type	metric ISO pitch 1.5 mm
Degree of protection	IP66 / IP68
Mass	see data tables
Material	
Cable gland	high impact-resistant polyamide
Finish	inherent color black or inherent color black, cap nut blue
Washer gasket	flat chloroprene gasket
Seal insert	chloroprene / neoprene or silicone
Ambient conditions	
Ambient temperature	chloroprene seal: -40 ... 70 °C (-40 ... 158 °F) silicone seal: -60 ... 70 °C (-76 ... 158 °F) sealing plugs: -60 ... 70 °C (-76 ... 158 °F)
Conformity	
Degree of protection	EN 60529
CE marking	0102

Type Code / Model Number

1		2		3		4		5		6		7
CG	**.**	********	**.**	*******	**.**	******	**.**	*****	**.**	******	**.**	**K****
CG	.	PIDS1	.	M20	.	PA	.	C	.	10	.	K50

Example: CG.PIDS1.M20.PA.C.10.K50

Cable gland, plastic, blue to indicate intrinsically safe circuits, double seal insert, thread size M20, body polyamide, chloroprene seals for -40 °C ... 70 °C, installation thread length 10 mm, fifty pieces

1	Series
CG	cable glands

2	Type
PEDS1	plastic glands, double seal insert, black
PIDS1	plastic glands, double seal insert, blue to indicate Ex i circuits

3	Thread, type and size
M*	metric ISO pitch 1.5; sizes see dimensions data table

4	Material
PA	polyamide

5	Material seals / O-Ring
C	chloroprene / neoprene
S	silicone

6	Thread length for installation in enclosure
**	length in mm

7	Packaging unit
	units not packaged, for use in Pepperl+Fuchs Solution Engineering Centers
K**	units quantity per package

Type Code / Model Number

1		2		3		4		5		6		7
SP	**.**	**PE**	**.**	*******	**.**	******	**.**	*****	**.**	******	**.**	**K****
SP	.	PE	.	M20	.	PA	.	C	.	15	.	K50

Example: SP.PE.M20.PA.C.15.K50
Stopping plug, plastic, thread size M20, body polyamide, chloroprene seal for -40 °C ... 70 °C, installation thread length 15 mm, fifty pieces

1	Series
SP	stopping plugs

2	Type
PE	plastic, black

3	Thread, type and size
M*	metric ISO pitch 1.5; sizes see dimensions data table

4	Material
PA	polyamide

5	Material seals / O-Ring
C	chloroprene / neoprene

6	Thread length for installation in enclosure
**	length in mm

7	Packaging unit
	units not packaged, for use in Pepperl+Fuchs Solution Engineering Centers
K**	units quantity per package

Variant-Specific Data

CG.PE* Dimensions

Type	Thread size	Clamping range [mm] seal insert combinations			Dimensions [mm]					
	TD	D	S1+S2	S1	H	L	TL	D2	SW1	SW2
CG.PEDS1.M12.PA.C.10.K50	M12	3 ... 6.5	3 ... 4	4 ... 6.5	30.3	40.3	10	17	15	15
CG.PEDS1.M12.PA.C.15.K50	M12	3 ... 6.5	3 ... 4	4 ... 6.5	30.3	45.3	15	17	15	15
CG.PEDS1.M16.PA.C.15.K50	M16	4 ... 10	4 ... 6	6 ... 10	37.2	47.2	15	25	22	22
CG.PEDS1.M16S.PA.C.10.K50	M16	4 ... 8	4 ... 5	5 ... 8	33.6	43.6	10	21.7	19	19
CG.PEDS1.M16S.PA.C.15.K50	M16	4 ... 8	4 ... 5	5 ... 8	33.6	48.2	15	21.7	19	19
CG.PEDS1.M20.PA.C.10.K50	M20	6 ... 12	6 ... 7.5	7.5 ... 12	37.8	47.8	10	27	24	24
CG.PEDS1.M20.PA.C.15.K50	M20	6 ... 12	6 ... 7.5	7.5 ... 12	37.8	52.4	15	27	24	24
CG.PEDS1.M20XL.PA.C.15.K50	M20	8 ... 14	8 ... 11	11 ... 14	37	52	15	30.9	27	27
CG.PEDS1.M25.PA.C.10.K25	M25	9 ... 17	9 ... 13	13 ... 17	42.2	47.7	10	32.5	29	29
CG.PEDS1.M25.PA.C.15.K25	M25	9 ... 17	9 ... 13	13 ... 17	42.2	47.7	15	32.5	29	29
CG.PEDS1.M25L.PA.C.15.K25	M25	10 ... 18	10 ... 13	13 ... 18	43.6	58.6	15	37.2	33	33
CG.PEDS1.M32.PA.C.10.K20	M32	12 ... 21	12 ... 16	16 ... 21	47.3	57.3	10	41	36	36
CG.PEDS1.M32.PA.C.15.K20	M32	12 ... 21	12 ... 16	16 ... 21	47.3	62.3	15	41	36	36
CG.PEDS1.M32L.PA.C.15.K20	M32	14 ... 25	14 ... 20	20 ... 25	48.7	63.7	15	47.1	42	42
CG.PEDS1.M40.PA.C.10.K10	M40	17 ... 28	17 ... 21	21 ... 28	52.4	62.4	10	52.4	46	46
CG.PEDS1.M40.PA.C.15.K10	M40	17 ... 28	17 ... 21	21 ... 28	52.4	67.4	15	52.4	46	46
CG.PEDS1.M50.PA.C.18.K05	M50	22 ... 38	22 ... 31	31 ... 38	60.1	78.1	18	67.8	60	60
CG.PEDS1.M63.PA.C.18.K05	M63	28 ... 44	28 ... 35	35 ... 44	60.4	78.4	18	72.4	65	65

CG.PE* Details and Accessories

Type	Thread size	Mass approx.		Diameter thru-hole [mm]	Nut torques [Nm]			End-caps color	Sealing plugs	Delivery quantity
	TD	Com-po-nent	Pack-aging unit	DT	SW1	SW2 S1+S2	SW2 S1			
CG.PEDS1.M12.PA.C.10.K50	M12	7 g	213 g	12 ... 12.2	1.5	1	2	black	BP.PDS.M12 .PA	50
CG.PEDS1.M12.PA.C.15.K50	M12	7 g	216 g	12 ... 12.2	1.5	1	2	black	BP.PDS.M12 .PA	50
CG.PEDS1.M16.PA.C.15.K50	M16	12.6 g	630 g	16 ... 16.2	1.5	3.5	4	black	BP.PDS.M16 -M20S.PA	50
CG.PEDS1.M16S.PA.C.10.K50	M16	8 g	361 g	16 ... 16.2	1.5	3.5	4	black	BP.PDS.M16 S.PA	50
CG.PEDS1.M16S.PA.C.15.K50	M16	10 g	365 g	16 ... 16.2	1.5	3.5	4	black	BP.PDS.M16 S.PA	50
CG.PEDS1.M20.PA.C.10.K50	M20	12 g	571 g	20 ... 20.2	2	5	5	black	BP.PDS.M20 .PA	50
CG.PEDS1.M20.PA.C.15.K50	M20	13 g	600 g	20 ... 20.2	2	5	5	black	BP.PDS.M20 .PA	50
CG.PEDS1.M20XL.PA.C.15.K50	M20	14 g	700 g	20 ... 20.2	2	5.5	5.5	black	BP.PDS.M20 XL-M25S.PA	50
CG.PEDS1.M25.PA.C.10.K25	M25	15 g	474 g	25 ... 25.2	2.5	5	5	black	BP.PDS.M25 .PA	25
CG.PEDS1.M25.PA.C.15.K25	M25	16 g	502 g	25 ... 25.2	2.5	5	5	black	BP.PDS.M25 .PA	25
CG.PEDS1.M25L.PA.C.15.K25	M25	17 g	686 g	25 ... 25.2	2.5	5.5	8	black	BP.PDS.M25 L-M32S.PA	25
CG.PEDS1.M32.PA.C.10.K20	M32	31 g	610 g	32 ... 32.3	4	4.5	6	black	BP.PDS.M32 .PA	20
CG.PEDS1.M32.PA.C.15.K20	M32	32 g	640 g	32 ... 32.3	4	4.5	6	black	BP.PDS.M32 .PA	20
CG.PEDS1.M32L.PA.C.15.K20	M32	26 g	520 g	32 ... 32.3	4	8	9	black	BP.PDS.M32 L.PA	20
CG.PEDS1.M40.PA.C.10.K10	M40	45 g	450 g	40 ... 40.3	6	5	5	black	BP.PDS.M40 .PA	10
CG.PEDS1.M40.PA.C.15.K10	M40	46 g	460 g	40 ... 40.3	6	5	5	black	BP.PDS.M40 .PA	10
CG.PEDS1.M50.PA.C.18.K05	M50	93 g	465 g	50 ... 50.3	8	18	22	black	BP.PDS.M50 .PA	5
CG.PEDS1.M63.PA.C.18.K05	M63	95 g	475 g	63 ... 63.3	10	22	24	black	BP.PDS.M63 .PA	5

*Knn: scope of delivery see table technical data

CG.PI* Dimensions

Type	Thread size	Clamping range [mm] seal insert combinations			Dimensions [mm]					
	TD	D	S1+S2	S1	H	L	TL	D2	SW1	SW2
CG.PIDS1.M12.PA.C.10.K50	M12	3 ... 6.5	3 ... 4	4 ... 6.5	30.3	40.3	10	17	15	15
CG.PIDS1.M12.PA.C.15.K50	M12	3 ... 6.5	3 ... 4	4 ... 6.5	25.3	45.3	15	17	15	15
CG.PIDS1.M16.PA.C.10.K50	M16	4 ... 10	4 ... 6	6 ... 10	37.2	47.2	10	25	22	22
CG.PIDS1.M16.PA.C.15.K50	M16	4 ... 10	4 ... 6	6 ... 10	37.2	47.2	15	25	22	22
CG.PIDS1.M16S.PA.C.10.K50	M16	4 ... 8	4 ... 5	5 ... 8	33.6	43.6	10	21.7	19	19
CG.PIDS1.M16S.PA.C.15.K50	M16	4 ... 8	4 ... 5	5 ... 8	33.6	48.6	15	21.7	19	19
CG.PIDS1.M20.PA.C.10.K50	M20	6 ... 12	6 ... 7.5	7.5 ... 12	37.8	47.8	10	27	24	24
CG.PIDS1.M20.PA.C.15.K50	M20	6 ... 12	6 ... 7.5	7.5 ... 12	37.8	52.8	15	27	24	24
CG.PIDS1.M25.PA.C.10.K25	M25	9 ... 17	9 ... 13	13 ... 17	42.2	52.2	10	32.5	29	29
CG.PIDS1.M25.PA.C.15.K25	M25	9 ... 17	9 ... 13	13 ... 17	42.2	57.2	15	32.5	29	29
CG.PIDS1.M25L.PA.C.15.K25	M25	10 ... 18	10 ... 13	13 ... 18	43.6	58.6	15	37.2	33	33
CG.PIDS1.M32.PA.C.10.K20	M32	12 ... 21	12 ... 16	16 ... 21	47.3	57.3	10	41	36	36
CG.PIDS1.M32.PA.C.15.K20	M32	12 ... 21	12 ... 16	16 ... 21	42.3	62.3	15	41	36	36
CG.PIDS1.M32L.PA.C.15.K20	M32	14 ... 25	14 ... 20	20 ... 25	48.7	63.7	15	47.1	42	42
CG.PIDS1.M40.PA.C.10.K10	M40	17 ... 28	17 ... 21	21 ... 28	52.4	62.4	10	52.4	46	46
CG.PIDS1.M40.PA.C.15.K10	M40	17 ... 28	17 ... 21	21 ... 28	52.4	67.4	15	52.4	46	46
CG.PIDS1.M50.PA.C.18.K05	M50	22 ... 38	22 ... 31	31 ... 38	60.1	78.1	18	67.8	60	60
CG.PIDS1.M63.PA.C.18.K05	M63	28 ... 44	28 ... 35	35 ... 44	60.4	78.4	18	72.4	65	65

CG.PI* Dimensions Details and Accessories

Type	Thread size	Mass approx.		Diameter thru-hole [mm]	Nut torques [Nm]			End-caps color	Sealing plugs	Delivery quantity
	TD	Com-po-nent	Pack-aging unit	DT	SW1	SW2 S1+S2	SW2 S1			
CG.PIDS1.M12.PA.C.10.K50	M12	7 g	210 g	12 ... 12.2	1.5	1	2	blue	BP.PDS.M12.PA	50
CG.PIDS1.M12.PA.C.15.K50	M12	7 g	214 g	12 ... 12.2	1.5	1	2	blue	BP.PDS.M12.PA	50
CG.PIDS1.M16.PA.C.10.K50	M16	12.6 g	630 g	16 ... 16.2	1.5	3.5	4	blue	BP.PDS.M16-M20S.PA	50
CG.PIDS1.M16.PA.C.15.K50	M16	12.6 g	630 g	16 ... 16.2	1.5	3.5	4	blue	BP.PDS.M16-M20S.PA	50
CG.PIDS1.M16S.PA.C.10.K50	M16	10 g	500 g	16 ... 16.2	1.5	3.5	4	blue	BP.PDS.M16S.PA	50
CG.PIDS1.M16S.PA.C.15.K50	M16	11 g	550 g	16 ... 16.2	1.5	3.5	4	blue	BP.PDS.M16S.PA	50
CG.PIDS1.M20.PA.C.10.K50	M20	13 g	580 g	20 ... 20.2	2	5	5	blue	BP.PDS.M20.PA	50
CG.PIDS1.M20.PA.C.15.K50	M20	14 g	609 g	20 ... 20.2	2	5	5	blue	BP.PDS.M20.PA	50
CG.PIDS1.M25.PA.C.10.K25	M25	17 g	477 g	25 ... 25.2	2.5	5	5	blue	BP.PDS.M25.PA	25
CG.PIDS1.M25.PA.C.15.K25	M25	18 g	504 g	25 ... 25.2	2.5	5	5	blue	BP.PDS.M25.PA	25
CG.PIDS1.M25L.PA.C.15.K25	M25	24.4 g	610 g	25 ... 25.2	2.5	5.5	8	blue	BP.PDS.M25L-M32S.PA	25
CG.PIDS1.M32.PA.C.10.K20	M32	31 g	620 g	32 ... 32.3	4	4.5	6	blue	BP.PDS.M32.PA	20
CG.PIDS1.M32.PA.C.15.K20	M32	26 g	630 g	32 ... 32.3	4	4.5	6	blue	BP.PDS.M32.PA	20
CG.PIDS1.M32L.PA.C.15.K20	M32	27 g	540 g	32 ... 32.3	4	8	9	blue	BP.PDS.M32L.PA	20
CG.PIDS1.M40.PA.C.10.K10	M40	45 g	450 g	40 ... 40.3	6	5	5	blue	BP.PDS.M40.PA	10
CG.PIDS1.M40.PA.C.15.K10	M40	46 g	460 g	40 ... 40.3	6	5	5	blue	BP.PDS.M40.PA	10
CG.PIDS1.M50.PA.C.18.K05	M50	93 g	465 g	50 ... 50.3	8	18	22	blue	BP.PDS.M50.PA	5
CG.PIDS1.M63.PA.C.18.K05	M63	95 g	475 g	63 ... 63.3	10	22	24	blue	BP.PDS.M63.PA	5

*Knn: scope of delivery see table technical data

Variant-Specific Data Stopping Plugs

Type	Thread size	Dimensions [mm]			Mass approx.		Diameter thru-hole [mm]	Nut torques [Nm]	Delivery quantity
	TD	L	TL	SW1	Component	Packaging unit	DT	SW1	
SP.PE.M12.PA.C.10.K50	M12	15	10	15	1.5 g	102 g	12 ... 12.2	1.5	50
SP.PE.M16.PA.C.15.K50	M16	19.3	15	19	4 g	161 g	16 ... 16.2	1.5	50
SP.PE.M20.PA.C.15.K50	M20	21	15	23	6 g	261 g	20 ... 20.2	2	50
SP.PE.M25.PA.C.15.K25	M25	20.8	15	28	7.5 g	175 g	25 ... 25.2	2.5	25
SP.PE.M32.PA.C.15.K20	M32	22.8	15	36	12 g	275 g	32 ... 32.3	4	20
SP.PE.M40.PA.C.18.K10	M40	26.5	18	46	22 g	220 g	40 ... 40.3	6	10
SP.PE.M50.PA.C.18.K05	M50	27.5	18	55	34 g	170 g	50 ... 50.3	8	5
SP.PE.M63.PA.C.18.K05	M63	27.5	18	69	52 g	260 g	63 ... 63.3	10	5

*Knn: scope of delivery see table technical data