

Type code

**Type**

E	Pulses per revolution 100 ... 2048
B	Pulses per revolution 1 ... 10000
A	Pulses per revolution 1 ... 65536

**Mechanical design**

A	through hollow shaft, 6 mm
B	through hollow shaft, 8 mm
C	through hollow shaft, 3/8"
D	through hollow shaft, 10 mm
E	through hollow shaft, 12 mm
F	through hollow shaft, 1/2"
G	through hollow shaft, 14 mm
H	through hollow shaft, 15 mm
J	through hollow shaft, 5/8" (fitting for collets, see accessories)

**Electrical interface**

A	4.5 ... 5.5 V, TTL/RS422
C	10 ... 32 V, TTL/RS422
E	10 ... 32 V, HTL/push pull
N	4.5 ... 5.5 V, SIN/COS 1,0 V <sub>pp</sub> (In combination with type B an 1024 pulses only)
U	4.5 ... 32 V, TTL/RS422, with 0-set function on pin 7 of the M23 connector. (In combination with type B or A and connection type A)
V	10 ... 32 V, TTL/RS422, with 0-set function on pin 7 of the M23 connector. (In combination with type B or A and connection type A)
W	10 ... 32 V, HTL/push pull, with 0-set function on pin 7 of the M23 connector. (In combination with type B or A and connection type A)

**Connection type**

A	M23 connector, 12-pin, radial
C	M12 connector, 8-pin, radial
K	8-core cable, universal 1.5 m <sup>1)</sup>
L	8-core cable, universal 3 m <sup>1)</sup>
M	8-core cable, universal 5 m <sup>1)</sup>
N	8-core cable, universal 10 m <sup>1)</sup>

**Resolution**

Always 5 digits in text, see "pulses per revolution"



<sup>1)</sup> The universal cable outlet is positioned in such a way that kink-free laying in radial or axial direction is possible.

Pulses per revolution

	<b>E</b>	<b>B</b>	<b>A</b>
Pulses per revolution	00100	00100	00100
	00200	00200	00200
	00250	00250	00250
	00256	00300	00300
	00314	00314	00314
	00360	00360	00360
	00500	00500	00500
	00512	00512	00512
	00720	00720	00720
	01000	01000	01000
	01024	01024	01024
	01250	01250	01250
	02000	02000	02000
	02048	02048	02048
		02500	02500
		03600	03600
		04000	04000
		04096	04096
		05000	05000
		07200	07200
		08192	08192
		10000	10000
			16384
			32768
			65536

**Typ**

E
B
A

Pulses per revolution 100 ... 2048  
 Pulses per revolution 1 ... 10000  
 Pulses per revolution 1 ... 65536

**Mechanical design**

A	Blind hollow shaft, 6 mm
B	Blind hollow shaft, 8 mm
C	Blind hollow shaft, 3/8"
D	Blind hollow shaft, 10 mm
E	Blind hollow shaft, 12 mm
F	Blind hollow shaft, 1/2"
G	Blind hollow shaft, 14 mm
H	Blind hollow shaft, 15 mm
J	Blind hollow shaft, 5/8" (fitting for collets, see accessories)

**Electrical interface**

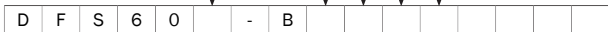
A	4.5 ... 5.5 V, TTL/RS422
C	10 ... 32 V, TTL/RS422
E	10 ... 32 V, HTL/push pull
N	4.5 ... 5.5 V, SIN/COS 1,0 V <sub>pp</sub> (In combination with type B an 1024 pulses only)
U	4.5 ... 5.5 V, TTL/RS422, with 0-set function on pin 7 of the M23 connector. (In combination with type B or A and connection type A or B only)
V	4.5 ... 32 V, TTL/RS422, with 0-set function on pin 7 of the M23 connector. (In combination with type B or A and connection type A or B only)
W	4.5 ... 32 V, HTL/push pull, with 0-set function on pin 7 of the M23 connector. (In combination with type B or A and connection type A or B only)

**Connection type**

A	M23 connector, 12-pin, radial
B	M23 connector, 12-pin, axial
C	M12 connector, 8-pin, radial
D	M12 connector, 8-pin, axial
K	8-core cable, universal 1.5 m <sup>1)</sup>
L	8-core cable, universal 3 m <sup>1)</sup>
M	8-core cable, universal 5 m <sup>1)</sup>
N	8-core cable, universal 10 m <sup>1)</sup>

**Resolution**

Al-ways 5 dig-its in text, see "Pul-ses per rev-o-lu-tion"



<sup>1)</sup> The universal cable outlet is positioned in such a way that kink-free laying in radial or axial direction is possible.

Pulses per revolution

	<b>E</b>	<b>B</b>	<b>A</b>
Pulses per revolution	00100	00100	00100
	00200	00200	00200
	00250	00250	00250
	00256	00300	00300
	00314	00314	00314
	00360	00360	00360
	00500	00500	00500
	00512	00512	00512
	00720	00720	00720
	01000	01000	01000
	01024	01024	01024
	01250	01250	01250
	02000	02000	02000
	02048	02048	02048
		02500	02500
		03600	03600
		04000	04000
		04096	04096
		05000	05000
		07200	07200
		08192	08192
		10000	10000
			16384
			32768
			65536



<sup>1)</sup> The universal cable outlet is positioned in such a way that kink-free laying in radial or axial direction is possible.

The following features can be programmed:  
 Pulses per revolution from 1 ... 65536 using programming tools PGT-08-S or PGT-10-Pro  
 Zero pulse width electrically 90°, 180°, 270° using programming tools PGT-08-S or PGT-10-Pro  
 Zero pulse width mechanically 1° ... 359° using programming tool PGT-10-Pro  
 Level of the output voltage TTL/HTL using programming tools PGT-08-S or PGT-10-Pro  
 Counting direction CW/CCW using Programming-Tools PGT -08-S or PGT -10-Pro  
 0-SET function using programming tools PGT-08-S or PGT-10-Pro  
 0-SET function via PIN 7 of the M23 connector by applying Us for at least 250 ms.

Pulses per revolution

	<b>E</b>	<b>B</b>	<b>A</b>
Pulses per revolution	00100	00100	00100
	00200	00200	00200
	00250	00250	00250
	00256	00300	00300
	00314	00314	00314
	00360	00360	00360
	00500	00500	00500
	00512	00512	00512
	00720	00720	00720
	01000	01000	01000
	01024	01024	01024
	01250	01250	01250
	02000	02000	02000
	02048	02048	02048
		02500	02500
		03600	03600
		04000	04000
		04096	04096
		05000	05000
		07200	07200
		08192	08192
		10000	10000
			16384
			32768
			65536

Typ	
E	Pulses per revolution 100 ... 2048
B	Pulses per revolution 1 ... 10000
A	Pulses per revolution 1 ... 65536

**Mechanical design**

4	Face mount flange, 10 x 19 mm solid shaft
1	Servo flange, 6 x 10 mm solid shaft

**Electrical interface**

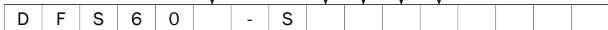
A	4.5 ... 5.5 V, TTL/RS422
C	10 ... 32 V, TTL/RS422
E	10 ... 32 V, HTL/push pull
N	4.5 ... 5.5 V, SIN/COS 1,0 V <sub>PP</sub> (In combination with type B and 1024)
U	4.5 ... 5.5 V, TTL/RS422, with O-Set function on Pin 7 of the M23-connector. (In combination with type B or A and connection type A or B only)
V	4.5 ... 32 V, TTL/RS422, with O-Set function on Pin 7 of the M23-connector. (In combination with type B or A and connection type A or B only)
W	4.5 ... 32 V, HTL/push pull, with O-Set function on Pin 7 of the M23-connector. (In combination with type B or A and connection type A or B only)

**Connection type**

A	M23 connector, 12-pin, radial
B	M23 connector, 12-pin, axial
C	M12 connector, 8-pin, radial
D	M12 connector, 8-pin, axial
K	8-core cable, universal 1.5 m <sup>1)</sup>
L	8-core cable, universal 3 m <sup>2)</sup>
M	8-core cable, universal 5 m <sup>2)</sup>
N	8-core cable, universal 10 m <sup>2)</sup>

**Resolution**

All-ways 5 digits in text, see "Pulses per revolution"

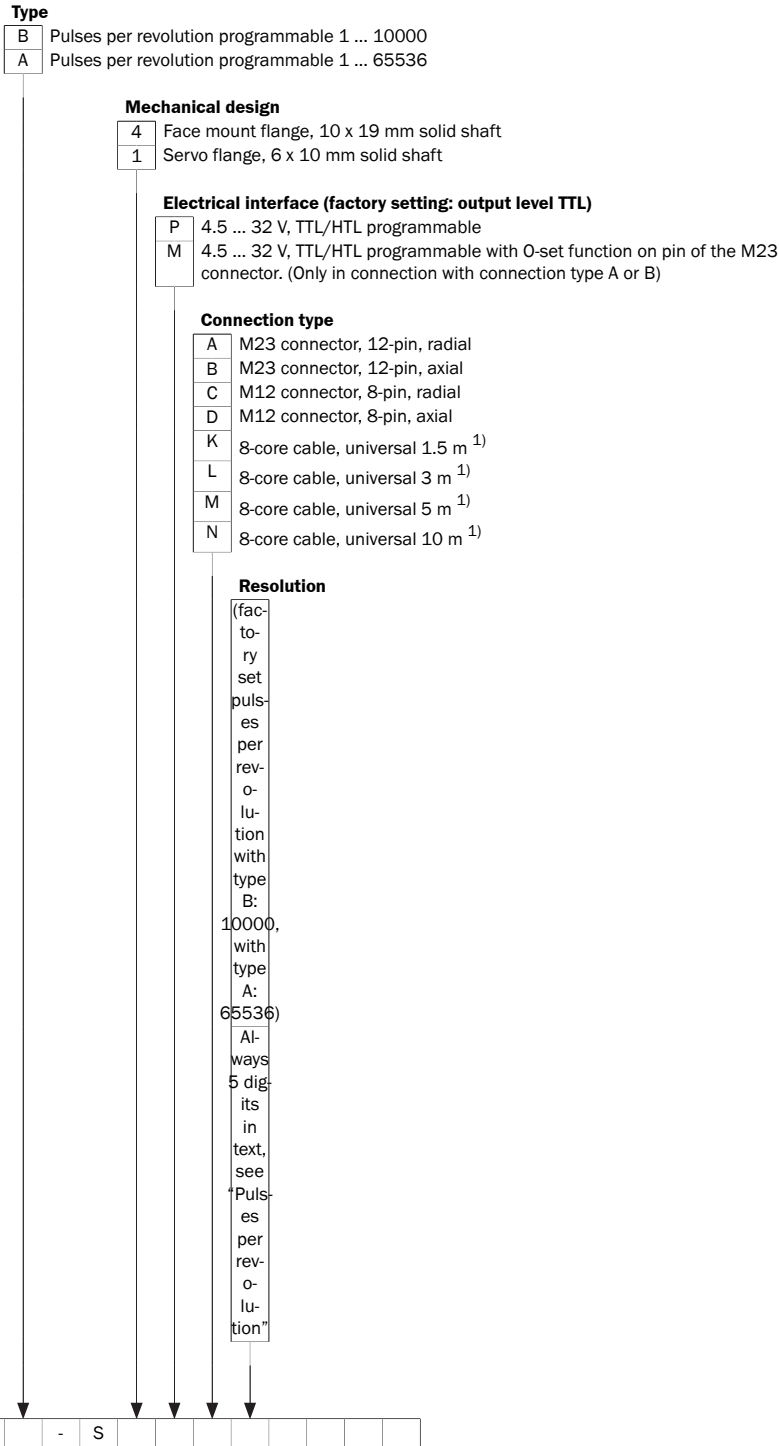


<sup>1)</sup> The universal cable outlet is positioned in such a way that kink-free laying in radial or axial direction is possible.  
<sup>2)</sup> The universal cable outlet is positioned in such a way that knik-free laying in radial or axial direction is possible.

Pulses per revolution

	<b>E</b>	<b>B</b>	<b>A</b>
Pulses per revolution	00100	00100	00100
	00200	00200	00200
	00250	00250	00250
	00256	00300	00300
	00314	00314	00314
	00360	00360	00360
	00500	00500	00500
	00512	00512	00512
	00720	00720	00720
	01000	01000	01000
	01024	01024	01024
	01250	01250	01250
	02000	02000	02000
	02048	02048	02048
		02500	02500
		03600	03600
		04000	04000
		04096	04096
		05000	05000
		07200	07200
		08192	08192
		10000	10000
			16384
			32768
			65536





<sup>1)</sup> The universal cable outlet is positioned in such a way that knick-free laying in radial or axial direction is possible.

The following features can be programmed:

- Pulses per revolution from 1 ... 65536 using programming tools PGT-08-S or PGT-10-Pro
- Zero pulse width electrically 90°, 180°, 270° using programming tools PGT-08-S or PGT-10-Pro
- Zero pulse width mechanically 1° ... 359° using programming tool PGT-10-Pro
- Level of the output voltage TTL/HTL using programming tools PGT-08-S or PGT-10-Pro
- Counting direction CW/CCW using Programming-Tools PGT -08-S or PGT -10-Pro
- 0-SET function using programming tools PGT-08-S or PGT-10-Pro
- 0-SET function via PIN 7 of the M23 connector by applying Us for at least 250 ms.

Pulses per revolution

	<b>E</b>	<b>B</b>	<b>A</b>
Pulses per revolution	00100	00100	00100
	00200	00200	00200
	00250	00250	00250
	00256	00300	00300
	00314	00314	00314
	00360	00360	00360
	00500	00500	00500
	00512	00512	00512
	00720	00720	00720
	01000	01000	01000
	01024	01024	01024
	01250	01250	01250
	02000	02000	02000
	02048	02048	02048
		02500	02500
		03600	03600
		04000	04000
		04096	04096
		05000	05000
		07200	07200
		08192	08192
		10000	10000
			16384
			32768
			65536

Type	
B	Pulses per revolution programmable 1 ... 10000
A	Pulses per revolution programmable 1 ... 65536

**Mechanical design**

A	Metal trough hollow shaft, 6 mm
B	Metal trough hollow shaft, 8 mm
C	Metal trough hollow shaft, 3/8"
D	Metal trough hollow shaft, 10 mm
E	Metal trough hollow shaft, 12 mm
F	Metal trough hollow shaft, 1/2"
G	Metal trough hollow shaft, 14 mm
H	Metal trough hollow shaft, 15 mm
J	Metal trough hollow shaft, 5/8" (fitting for collets, see accessories)

**Electrical interface (factory setting: output level TTL)**

P	4.5 ... 32 V, TTL/HTL programmable
M	4.5 ... 32 V, TTL/HTL programmable with 0-set function on pin 7 of the M23 connector. (Only in connection with connection type A)

**Connection type**

A	M23 connector, 12-pin, radial
C	M12 connector, 8-pin, radial
K	8-core cable, universal 1.5 m <sup>1)</sup>
L	8-core cable, universal 3 m <sup>1)</sup>
M	8-core cable, universal 5 m <sup>1)</sup>
N	8-core cable, universal 10 m <sup>1)</sup>

**Resolution**

(factory set pulses per revolution with type B: 10000, with type A: 65536)  
Always 5 digits in text, see "Pulses per revolution"



<sup>1)</sup> The universal cable outlet is positioned in such a way that kink-free laying in radial or axial direction is possible.

The following features can be programmed:  
 Pulses per revolution from 1 ... 65536 using programming tools PGT-08-S or PGT-10-Pro  
 Zero pulse width electrically 90°, 180°, 270° using programming tools PGT-08-S or PGT-10-Pro  
 Zero pulse width mechanically 1° ... 359° using programming tool PGT-10-Pro  
 Level of the output voltage TTL/HTL using programming tools PGT-08-S or PGT-10-Pro  
 Counting direction CW/CCW using Programming-Tools PGT -08-S or PGT -10-Pro  
 0-SET function using programming tools PGT-08-S or PGT-10-Pro

0-SET function via PIN 7 of the M23 connector by applying Us for at least 250 ms.

Pulses per revolution

	<b>E</b>	<b>B</b>	<b>A</b>
Pulses per revolution	00100	00100	00100
	00200	00200	00200
	00250	00250	00250
	00256	00300	00300
	00314	00314	00314
	00360	00360	00360
	00500	00500	00500
	00512	00512	00512
	00720	00720	00720
	01000	01000	01000
	01024	01024	01024
	01250	01250	01250
	02000	02000	02000
	02048	02048	02048
		02500	02500
		03600	03600
		04000	04000
		04096	04096
		05000	05000
		07200	07200
		08192	08192
		10000	10000
			16384
			32768
			65536