

The New Benchmark for the C-Slot
BMF 204 and BMF 214 series

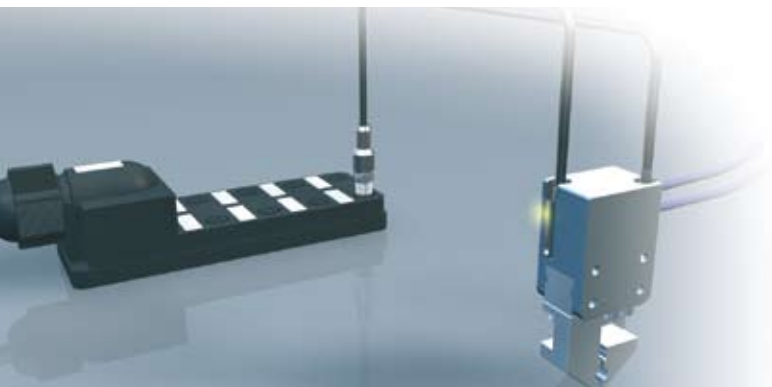


more added value

BMF 204 and BMF 214 – the new benchmark for the C-slot

more added value

The design is adapted to the slot, i.e. the sensor can be inserted into the slot.	→ “Rock-solid” retention in the slot.
The retaining element is integrated into the sensor.	→ Installed and adjusted quickly and easily.
Flush-fitting, the sensor vanishes in the slot.	→ Can also be used in space-critical applications.
Miniature design, extremely short.	→ Optimum solution for every gripper and short-stroke cylinder.
Very precise and reliable electronics.	→ High-precision positioning.

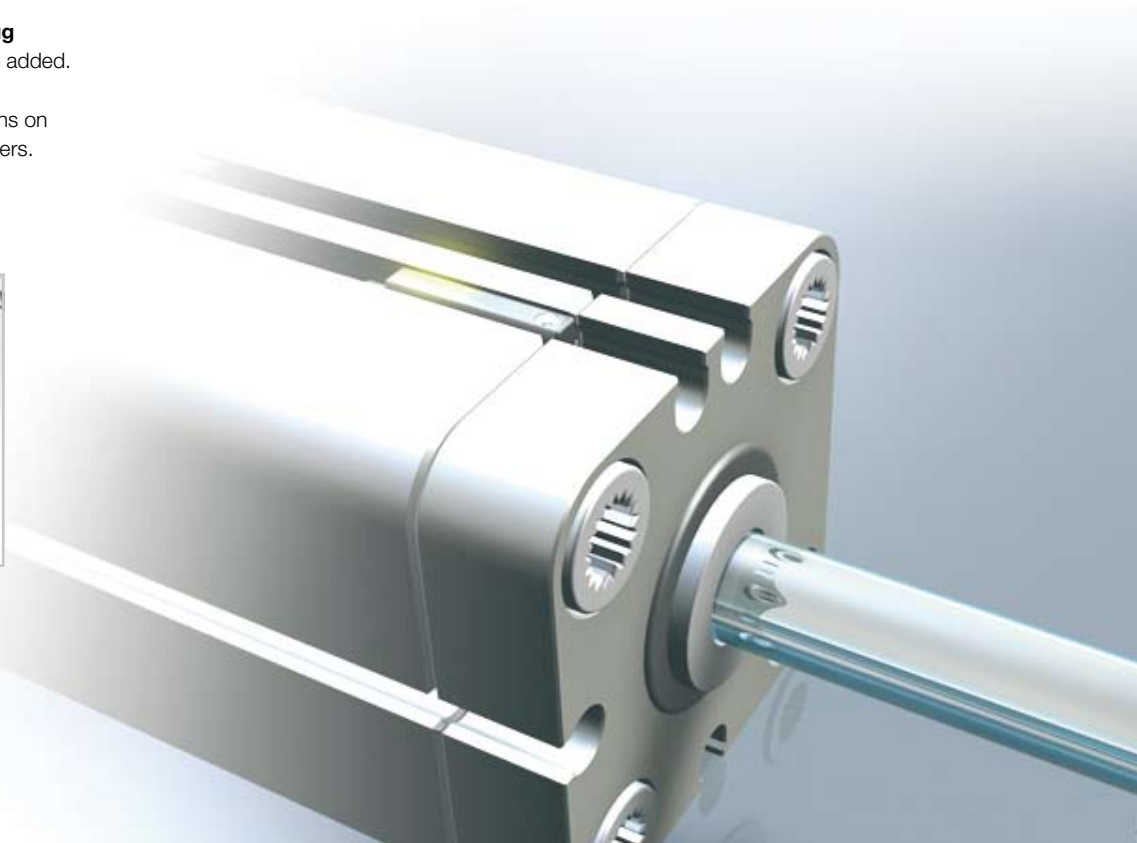


V-Twin – two sensors, one plug

- Save plugs and increase value added.
- Only one slot for two sensors.
- Flexibly detect multiple positions on pneumatic grippers and cylinders.



The BMF 204 and BMF 214 have an impressive, extremely compact design.

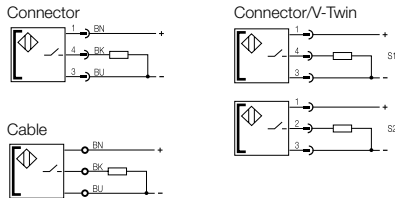


BMF 204 for C-slot e.g. Festo

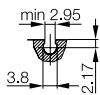


Series	BMF 204	BMF 204	BMF 204
Version		V-Twin M8	V-Twin M12
PNP, NO contact	BMF 204K-PS-C-2A-SA2-S49-00,3	BMF 204K-PS-C-2A-SA95-S75-00,3	BMF 204K-PS-C-2A-SA95-S4-00,3
Rated switching field $ H_n $	1.2 kA/m	1.2 kA/m	1.2 kA/m
Assured switching field $ H_a $	≥ 2 kA/m	≥ 2 kA/m	≥ 2 kA/m
On/off delay	≤ 0.07 ms	≤ 0.07 ms	≤ 0.07 ms
Supply voltage U_B	10...30 V DC	10...30 V DC	10...30 V DC
Voltage drop U_d	≤ 2.5 V	≤ 2.5 V	≤ 2.5 V
Rated insulation voltage U_i	75 V DC	75 V DC	75 V DC
Rated operating current I_o	100 mA	100 mA	100 mA
No-load supply current I_o max.	≤ 8 mA	≤ 8 mA	≤ 8 mA
Reverse polarity protected	yes	yes	yes
Short circuit protected	yes	yes	yes
Ambient temperature range T_a	-25...+85 °C	-25...+85 °C	-25...+85 °C
Utilization category	DC 13	DC 13	DC 13
Degree of protection in accordance with IEC 60529	IP 67	IP 67	IP 67
Housing material	PBT	PBT	PBT
Connection	0.3 m cable (PUR) with connector	0.3 m cable (PUR) with connector	0.3 m cable (PUR) with connector
No. of conductors \times cross-section			
Approval	cULus	cULus	cULus
Recommended connector	BKS-B/S 48	BKS-S 74	BKS-B/S 19

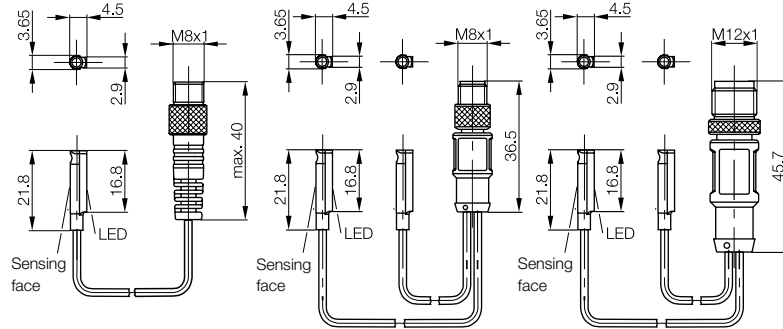
Wiring diagrams



Festo slot



SMC slot



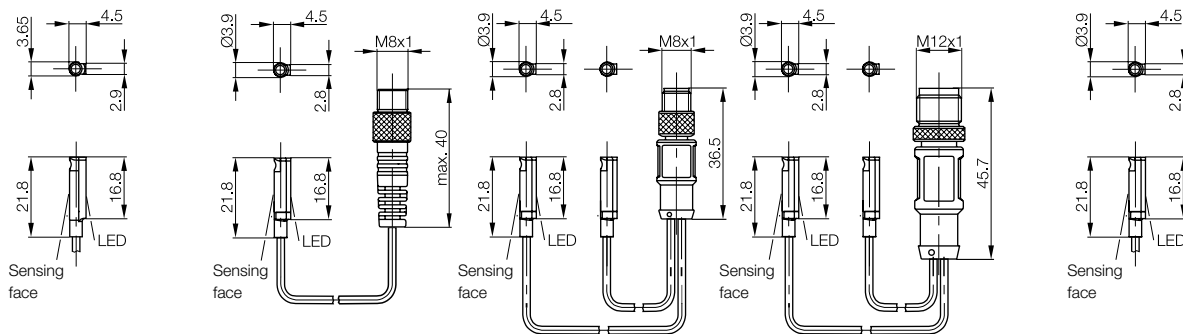
Sensors for Pneumatic Cylinders

BMF 204 and BMF 214

BMF 214 for C-slot e.g. SMC



BMF 204	BMF 214	BMF 214 V-Twin M8	BMF 214 V-Twin M12	BMF 214
BMF 204K-PS-C-2A-PU-02	BMF 214K-PS-C-2A-SA2-S49-00,3	BMF 214K-PS-C-2A-SA95-S75-00,3	BMF 214K-PS-C-2A-SA95-S4-00,3	BMF 214K-PS-C-2A-PU-02
1.2 kA/m	1.2 kA/m	1.2 kA/m	1.2 kA/m	1.2 kA/m
≥ 2 kA/m	≥ 2 kA/m	≥ 2 kA/m	≥ 2 kA/m	≥ 2 kA/m
≤ 0.07 ms	≤ 0.07 ms	≤ 0.07 ms	≤ 0.07 ms	≤ 0.07 ms
10...30 V DC	10...30 V DC	10...30 V DC	10...30 V DC	10...30 V DC
≤ 2.5 V	≤ 2.5 V	≤ 2.5 V	≤ 2.5 V	≤ 2.5 V
75 V DC	75 V DC	75 V DC	75 V DC	75 V DC
100 mA	100 mA	100 mA	100 mA	100 mA
≤ 8 mA	≤ 8 mA	≤ 8 mA	≤ 8 mA	≤ 8 mA
yes	yes	yes	yes	yes
yes	yes	yes	yes	yes
-25...+85 °C	-25...+85 °C	-25...+85 °C	-25...+85 °C	-25...+85 °C
DC 13	DC 13	DC 13	DC 13	DC 13
IP 67	IP 67	IP 67	IP 67	IP 67
PBT	PBT	PBT	PBT	PBT
2 m cable PUR 3x0.1 mm ²	0.3 m cable (PUR) with connector	0.3 m cable (PUR) with connector	0.3 m cable (PUR) with connector	2 m cable PUR 3x0.1 mm ²
cULus	cULus BKS-B/S 48	cULus BKS-S 74	cULus BKS-B/S 19	cULus



Sensors for Pneumatic Cylinders

BMF 204 and BMF 214

Balluff magnetic field sensors – flexible position sensing on all cylinders and grippers

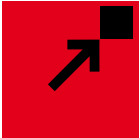
<ul style="list-style-type: none"> ■ insertable ■ integrated holder 	<p>T-slot BMF 307</p> 	<p>C-slot New: BMF 204 and BMF 214</p> 
<ul style="list-style-type: none"> ■ insertable from above ■ integrated holder 	<p>BMF 315</p> 	<p>BMF 273</p> 
<ul style="list-style-type: none"> ■ Only Balluff retaining system ■ With extra retaining brackets 	<p>BMF 305*</p> 	<p>BMF 303* BMF 103*</p> 

*May also be universally used for other slots, but size optimized for the specific slot.

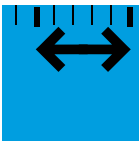


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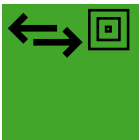
sensors worldwide



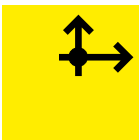
Object Detection



Linear Position Sensing



Industrial Identification



Industrial Networking and Connectivity



Mechanical Accessories



You can find out more about the wide object detection product range from our brochures, on CD-ROM, DVD-ROM or online.



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