

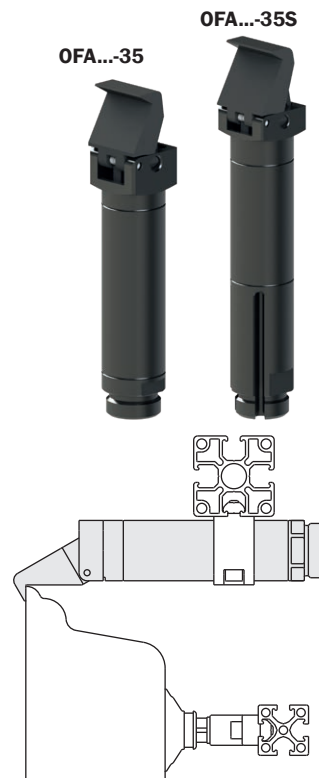
Pneumatische Ein-Finger-Winkelgreifer zum Klemmen Baureihe OF

- Einfachwirkender Antrieb.
- Magnetische Sensoren als Sonderzubehöerteile.
- Lebensmittelfett FDA-H1.

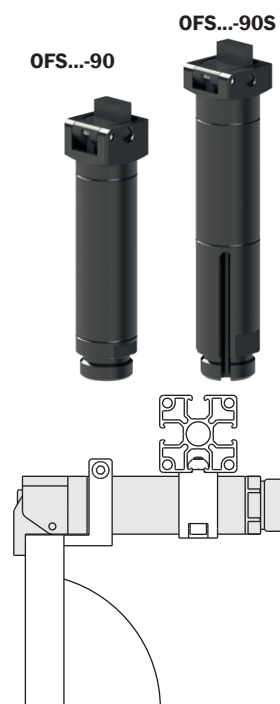
One finger angular pneumatic grippers for clamping, series OF

- Single acting.
- Optional magnetic sensors.
- Food grade grease FDA-H1.

	OFA14-35	OFA20-35 OFA20-35S	OFA30-35 OFA30-35S
Medium Medium	Druckluft nach ISO 8573-1:2010 [7:4:4] Compressed air in compliance with ISO 8573-1:2010 [7:4:4]		
Greifergehäuse Gripper body	Aluminium Aluminium		
Betriebsdruck Pressure range	2.5 ÷ 8 bar		
Betriebstemperatur Temperature range	5 ÷ 60 °C.		
Hub Stroke	35°		
Bohrung Piston bore	Ø10 mm	Ø16 mm	Ø25 mm
Drehmoment bei 6 bar, schließend Closing torque at 6 bar	26 Ncm	100 Ncm	430 Ncm
Luftverbrauch pro Zyklus Cycle air consumption	0.4 cm ³	1.24 cm ³	4.56 cm ³
Gewicht Weight	25 g	65 g 86 g	206 g 272 g



	OFS14-90	OFS20-90 OFS20-90S	OFS30-90 OFS30-90S
Medium Medium	Druckluft nach ISO 8573-1:2010 [7:4:4] Compressed air in compliance with ISO 8573-1:2010 [7:4:4]		
Greifergehäuse Gripper body	Aluminium Aluminium		
Betriebsdruck Pressure range	2.5 ÷ 8 bar		
Betriebstemperatur Temperature range	5 ÷ 60 °C.		
Hub Stroke	95°		
Bohrung Piston bore	Ø10 mm	Ø16 mm	Ø25 mm
Drehmoment bei 6 bar, schließend Closing torque at 6 bar	19 Ncm	70 Ncm	300 Ncm
Luftverbrauch pro Zyklus Cycle air consumption	1 cm ³	3.52 cm ³	12.9 cm ³
Gewicht Weight	23 g	60 g 80 g	185 g 245 g

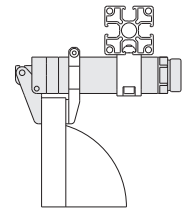


Pneumatische Ein-Finger-Winkelgreifer zum Klemmen Baureihe OF

- Einfachwirkender Antrieb.
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One finger angular pneumatic grippers for clamping, series OF

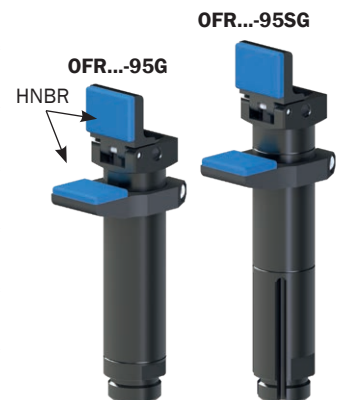
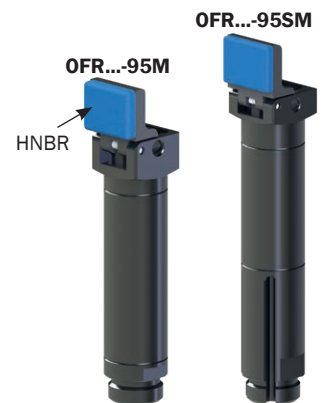
- Single acting.
- Optional magnetic sensors.
- Food grade grease FDA-H1.



	OFR14-95	OFR20-95 OFR20-95S	OFR30-95 OFR30-95S
Medium Medium	Druckluft nach ISO 8573-1:2010 [7:4:4] Compressed air in compliance with ISO 8573-1:2010 [7:4:4]		
Greifergehäuse Gripper body	Aluminium Aluminium		
Betriebsdruck Pressure range	2.5 ÷ 8 bar		
Betriebstemperatur Temperature range	5 ÷ 60 °C.		
Hub Stroke	95°		
Bohrung Piston bore	Ø10 mm	Ø16 mm	Ø25 mm
Drehmoment bei 6 bar, schließend Closing torque at 6 bar	19 Ncm	70 Ncm	300 Ncm
Luftverbrauch pro Zyklus Cycle air consumption	1 cm ³	3.52 cm ³	12.9 cm ³
Gewicht Weight	25 g	60 g 81 g	193 g 257 g

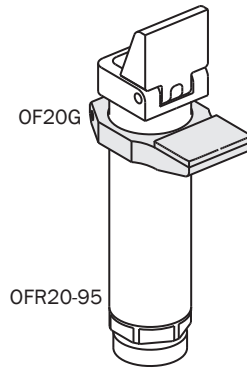
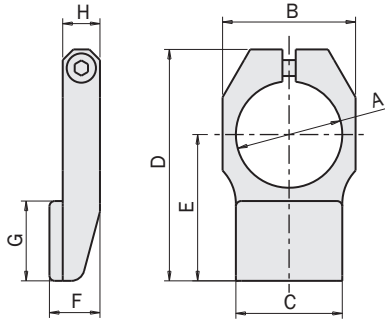
	OFR14-95M	OFR20-95M OFR20-95SM	OFR30-95M OFR30-95SM
Medium Medium	Druckluft nach ISO 8573-1:2010 [7:4:4] Compressed air in compliance with ISO 8573-1:2010 [7:4:4]		
Greifergehäuse Gripper body	Aluminium Aluminium		
Betriebsdruck Pressure range	2.5 ÷ 8 bar		
Betriebstemperatur Temperature range	5 ÷ 60 °C.		
Hub Stroke	95°		
Bohrung Piston bore	Ø10 mm	Ø16 mm	Ø25 mm
Drehmoment bei 6 bar, schließend Closing torque at 6 bar	19 Ncm	70 Ncm	300 Ncm
Luftverbrauch pro Zyklus Cycle air consumption	1 cm ³	3.52 cm ³	12.9 cm ³
Gewicht Weight	25 g	60 g 81 g	790 g 990 g

	OFR14-95G	OFR20-95G OFR20-95SG	OFR30-95G OFR30-95SG
Medium Medium	Druckluft nach ISO 8573-1:2010 [7:4:4] Compressed air in compliance with ISO 8573-1:2010 [7:4:4]		
Greifergehäuse Gripper body	Aluminium Aluminium		
Betriebsdruck Pressure range	2.5 ÷ 8 bar		
Betriebstemperatur Temperature range	5 ÷ 60 °C.		
Hub Stroke	95°		
Bohrung Piston bore	Ø10 mm	Ø16 mm	Ø25 mm
Drehmoment bei 6 bar, schließend Closing torque at 6 bar	19 Ncm	70 Ncm	300 Ncm
Luftverbrauch pro Zyklus Cycle air consumption	1 cm ³	3.52 cm ³	12.9 cm ³
Gewicht Weight	30 g	80 g 100 g	230 g 300 g



Stopper für OFR-Greifer

(Kit mit Schrauben)



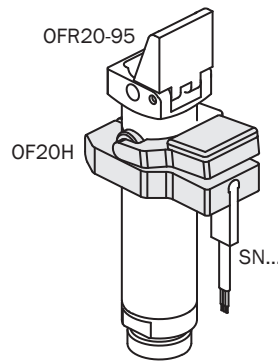
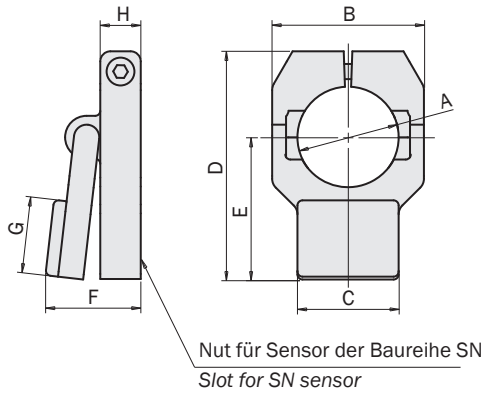
Fixed stopper for OFR grippers

(kit with screws)

	OF14G	OF20G	OF30G
A [mm]	Ø14	Ø20	Ø30
B [mm]	19	25	37
C [mm]	14	20	30
D [mm]	32	43.5	63
E [mm]	19	27.5	40
F [mm]	10	9.5	12
G [mm]	11	15	20
H [mm]	6	7	9
Gewicht Weight	6g	12g	30g

Stopper für magnetischen Sensor

(Kit mit Schrauben)



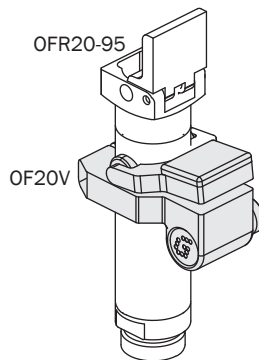
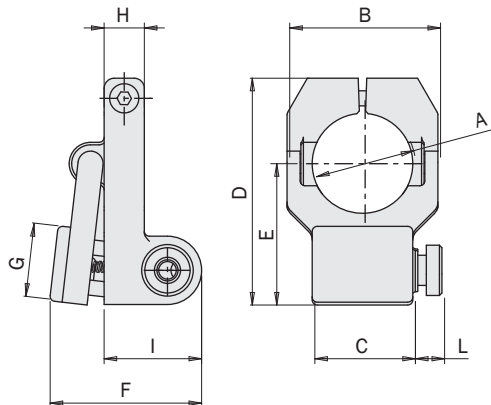
Stopper for magnetic sensor

(kit with screws)

	OF14H	OF20H	OF30H
A [mm]	Ø14	Ø20	Ø30
B [mm]	22	30	42
C [mm]	14	20	30
D [mm]	34.5	45	64
E [mm]	21	28	40
F [mm]	17.6	18.7	25.5
G [mm]	11	15	20
H [mm]	8	8	12
I [mm]	Nur für SN-Sensoren Slot for SN sensors		
Gewicht Weight	15g	20g	28g

Stopper für Vakuumsensor

(Kit mit Schrauben)



Stopper for vacuum sensor

(kit with screws)

	OF14V	OF20V	OF30V
A [mm]	Ø14	Ø20	Ø30
B [mm]	22	30	42
C [mm]	14	20	30
D [mm]	34.5	45.1	64
E [mm]	21	28.1	40
F [mm]	28.9	30.1	38
G [mm]	11	15	20
H [mm]	8	8	12
I [mm]	19.3	19.5	24.4
L [mm]	11.3	5.8	5.8
Gewicht Weight	8.9	13.4	32.7

Magnetische Sensoren als Sonderzubehörteile

Das Erfassen der Arbeitsposition unterliegt einem oder mehreren magnetischen Näherungssensoren (Optional), welche die Position über den am Kolben angebrachten Magneten erheben. Im Hinblick auf die Funktionstüchtigkeit ist deren Einsatz in nächster Nähe von starken Magnetfeldern oder großen Massen aus ferromagnetischem Material zu vermeiden.

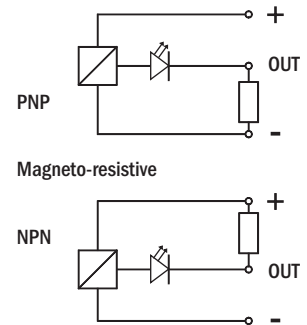
Optional magnetic sensors

The operating position is detected by magnetic proximity sensors (optional) through a magnet placed on the piston. The use of magnetic proximity sensors is to be avoided in the vicinity of large masses of ferromagnetic material or intense magnetic fields as this may cause detection problems.

Einsetzbare Sensoren:

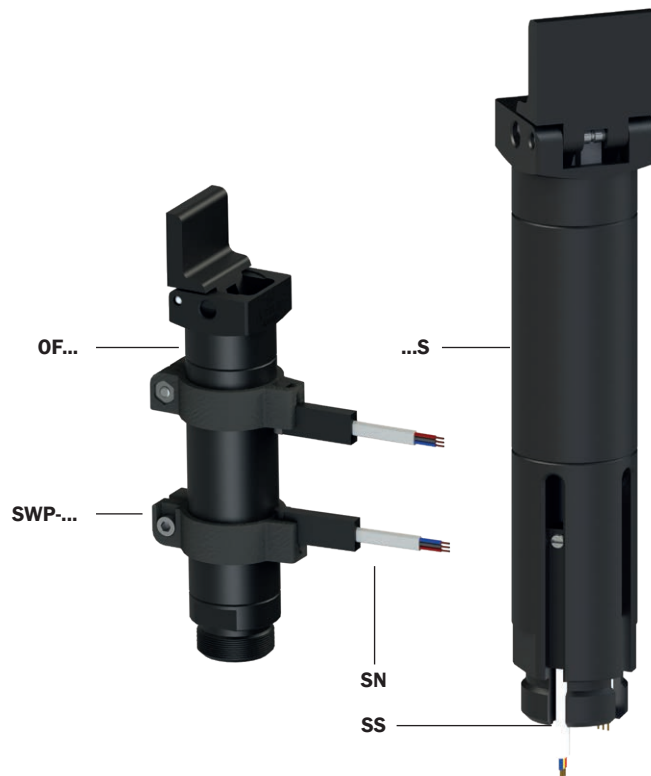
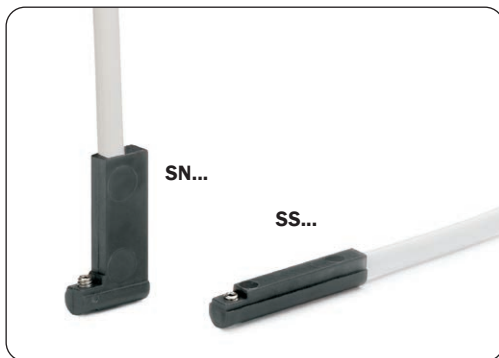
The sensors that can be used are:

SN4N225-G	PNP	2.5m Kabel 2.5m cable
SN4M225-G	NPN	
SN3N203-G	PNP	M8 Stecker Snap M8 plug connector
SN3M203-G	NPN	
SS4N225-G	PNP	2.5m Kabel 2.5m cable
SS4M225-G	NPN	2.5m Kabel 2.5m cable
SS3N203-G	PNP	M8 Stecker Snap M8 plug connector
SS3M203-G	NPN	



Sie sind alle mit einem 3-Leiter-Flachkabel und einer Led ausgestattet.

They are all provided with a 3-wire flat cable and a LED.



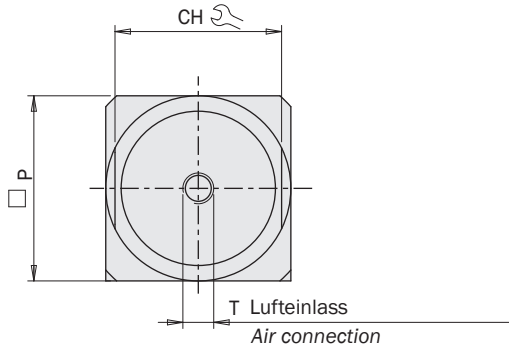
OF...	SWP-...
OF14...	SWP-014
OF20...	SWP-020
OF30...	SWP-030

In den Versionen ...S sind die Sensoren in den dazu bestimmten Nuten versenkt. In den anderen Versionen bedarf es einer Außenschelle (SWP-...).

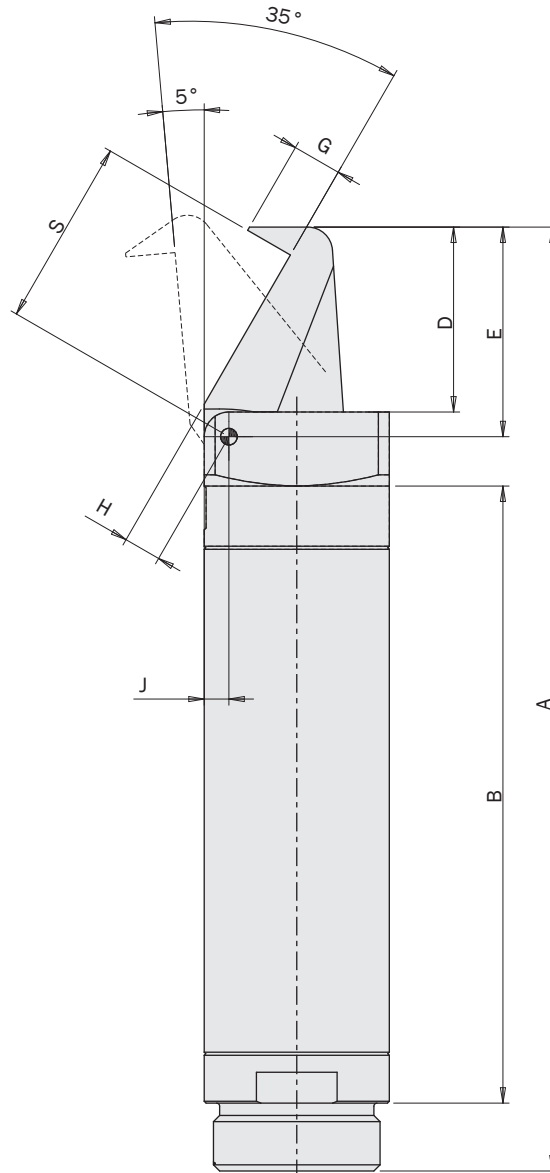
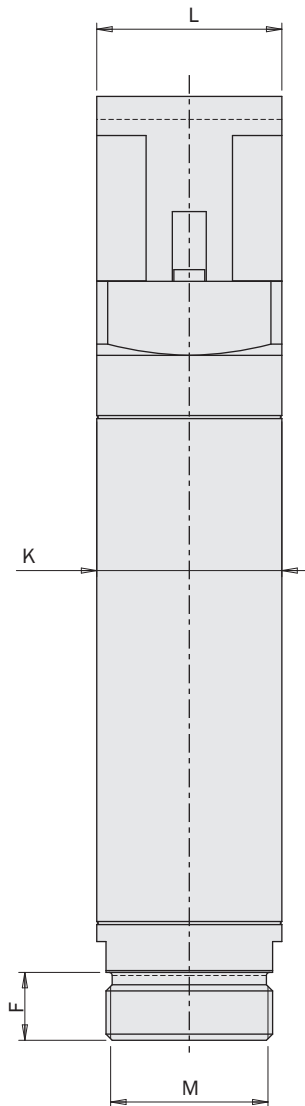
In the ...S versions, the sensors are embedded in their slots. In the other versions, an external bracket (SWP-...) is required.

Maße (mm)
Dimensions (mm)

OFA...



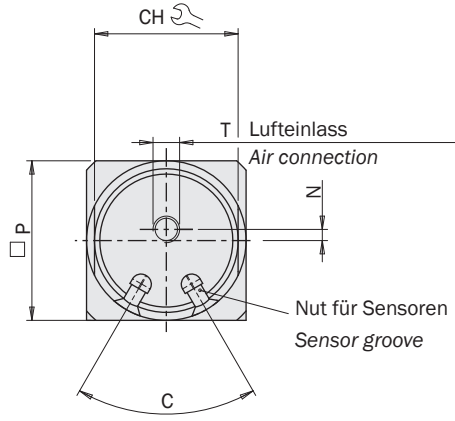
	OFA14-35	OFA20-35	OFA30-35
A	74	106	153
B	45.5	68.5	100
D	14	20.5	30
E	16	23	34
F	5.5	8	11
G	4.5	6	8
H	3.4	3.9	6
J	2	2.5	4
K	Ø14	Ø20	Ø30
L	14	20	30
M	M12x1	M17x1	M27x1
P	14	20	30
S	13.5	20.2	30.5
T	M5	M5	M5
CH	12	17	27



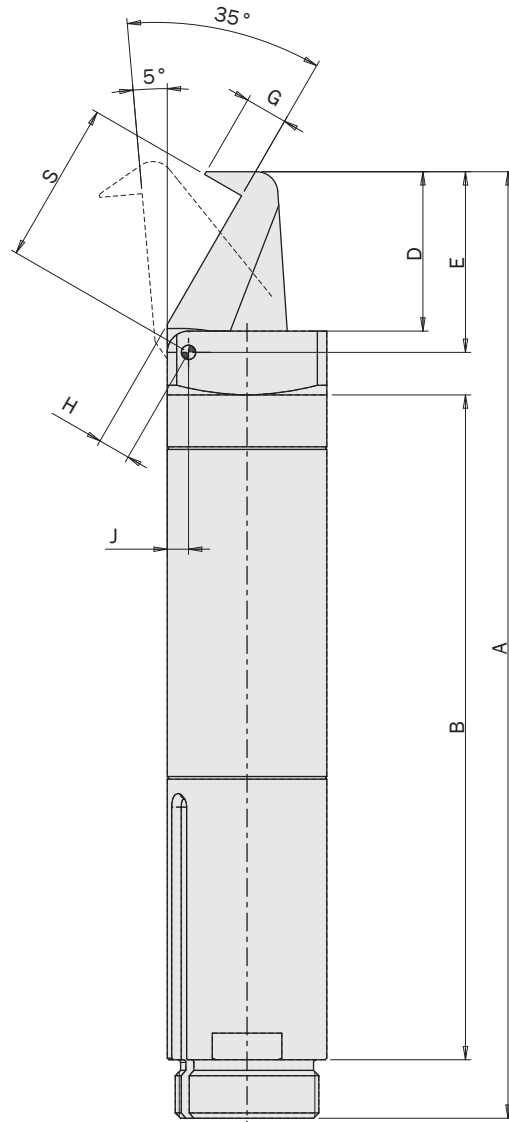
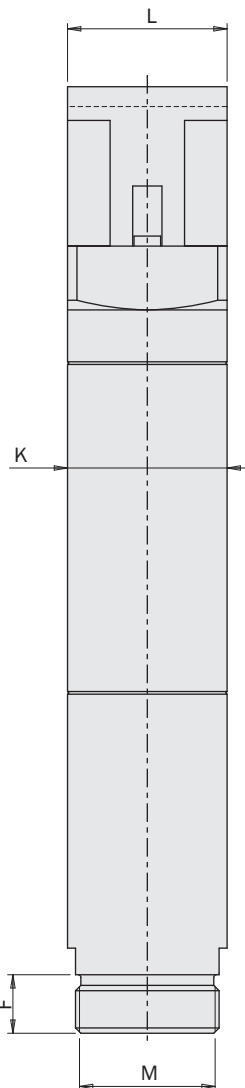
FIRST ANGLE PROJECTION

Maße (mm)
Dimensions (mm)

OFA...S



	OFA20-35S	OFA30-35S
A	120.5	178
B	83	125
C	80°	60°
D	20.5	30
E	23	34
F	8	11
G	6	8
H	3.9	6
J	2.5	4
K	∅20	∅30
L	20	30
M	M17x1	M27x1
N	1.5	-
P	20	30
S	20.2	30.5
T	M5	M5
CH	17	27

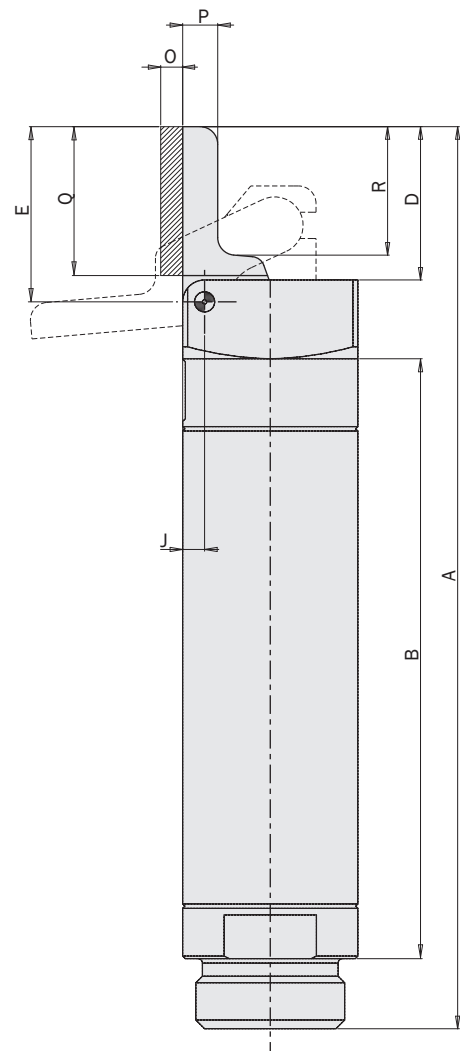
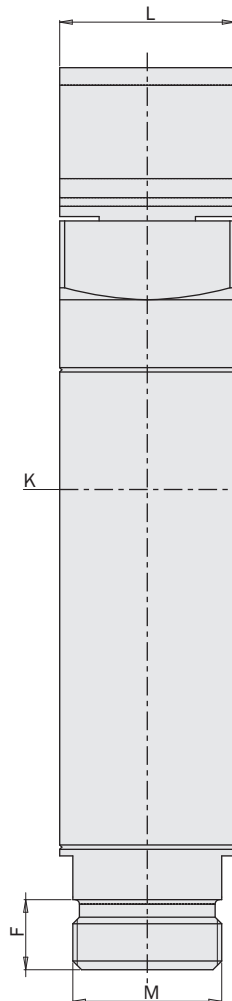
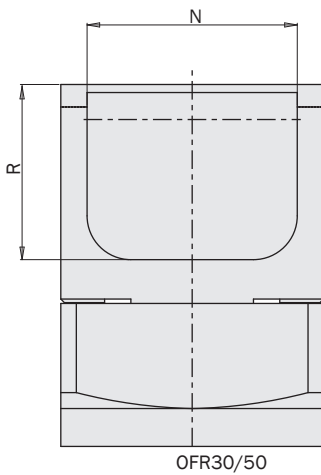
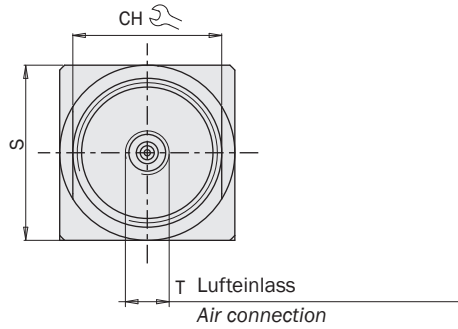


FIRST ANGLE
PROJECTION

Maße (mm)
Dimensions (mm)

OFR...

	A	B	D	E	F	J	K	L	M	N	O	P	Q	R	S	T	CH
OFR14-95	72	45.5	12	14	5.5	2	Ø14	14	M12x1	-	-	3	-	9.5	14	M5	12
OFR20-95	103	68.5	17.5	20	8	2.5	Ø20	20	M17x1	-	-	4	-	14.5	20	M5	17
OFR30-95	148	100	25	29	11	4	Ø30	30	M27x1	24	-	5	-	20	30	M5	27
OFR14-95M	72	45.5	12	14	5.5	2	Ø14	14	M12x1	-	2.5	3	11	9.5	14	M5	12
OFR20-95M	103	68.5	17.5	20	8	2.5	Ø20	20	M17x1	-	2.5	4	15	14.5	20	M5	17
OFR30-95M	148	100	25	29	11	4	Ø30	30	M27x1	24	3	5	20	20	30	M5	27

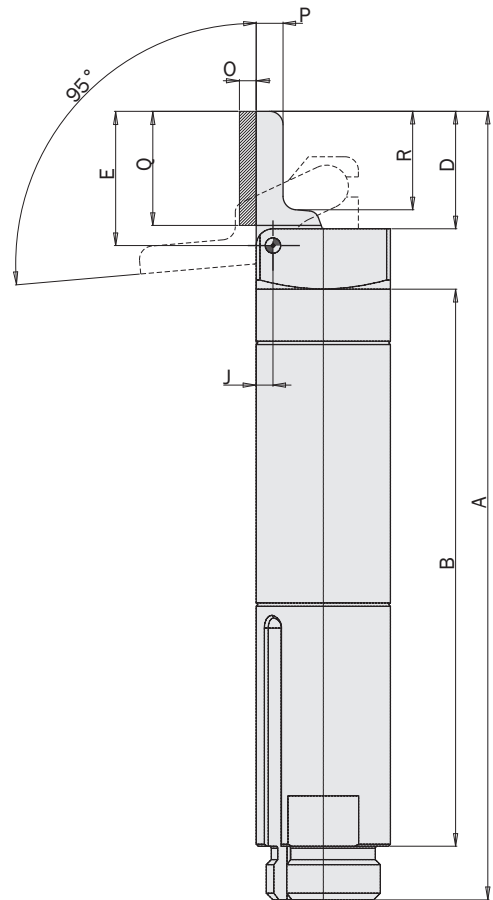
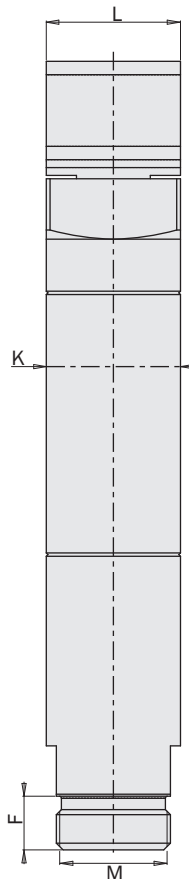
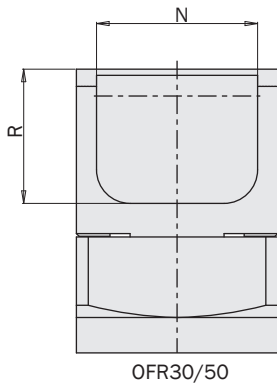
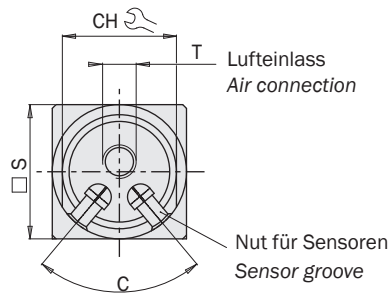


FIRST ANGLE PROJECTION

Maße (mm)
Dimensions (mm)

OFR...S

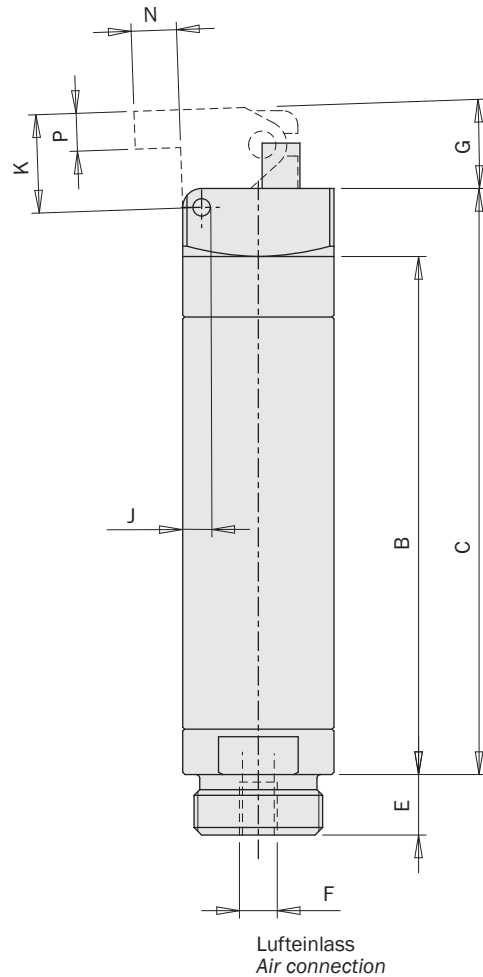
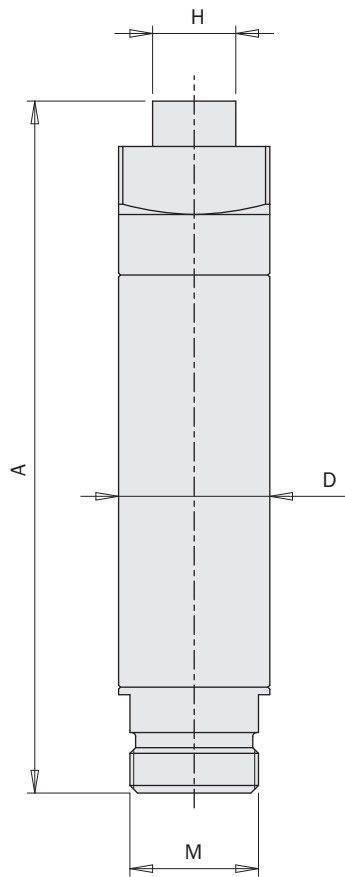
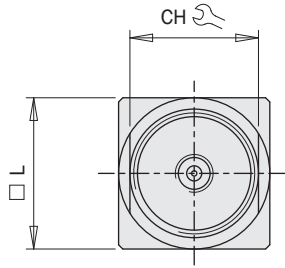
	A	B	C	D	E	F	J	K	L	M	N	O	P	Q	R	S	T	U	CH
OFR20-95S	117.5	83	80°	17.5	20	8	2.5	Ø20	20	M17x1	-	-	4	-	14.5	20	M5	1.5	17
OFR30-95S	173	125	60°	25	29	11	4	Ø30	30	M27x1	24	-	5	-	20	30	M5	-	27
OFR20-95SM	117.5	83	80°	17.5	20	8	2.5	Ø20	20	M17x1	-	2.5	4	15	14.5	20	M5	1.5	17
OFR30-95SM	173	125	60°	25	29	11	4	Ø30	30	M27x1	24	3	5	20	20	30	M5	-	27



Maße (mm)
Dimensions (mm)

OFS...

	A	B	C	D	E	F	G	H	J	K	L	M	N	P	CH
OFS14-90	64	45.5	54.5	Ø14	5.5	M5	2°	8	2	9	14	M12x1	4	4	12
OFS20-90	91.5	68.5	77.5	Ø20	8	M5	2°	11	2.5	13	20	M17x1	6	5	17
OFS30-90	134	100	112	Ø30	11	M5	2°	14	4	20	30	M27x1	11	6	27



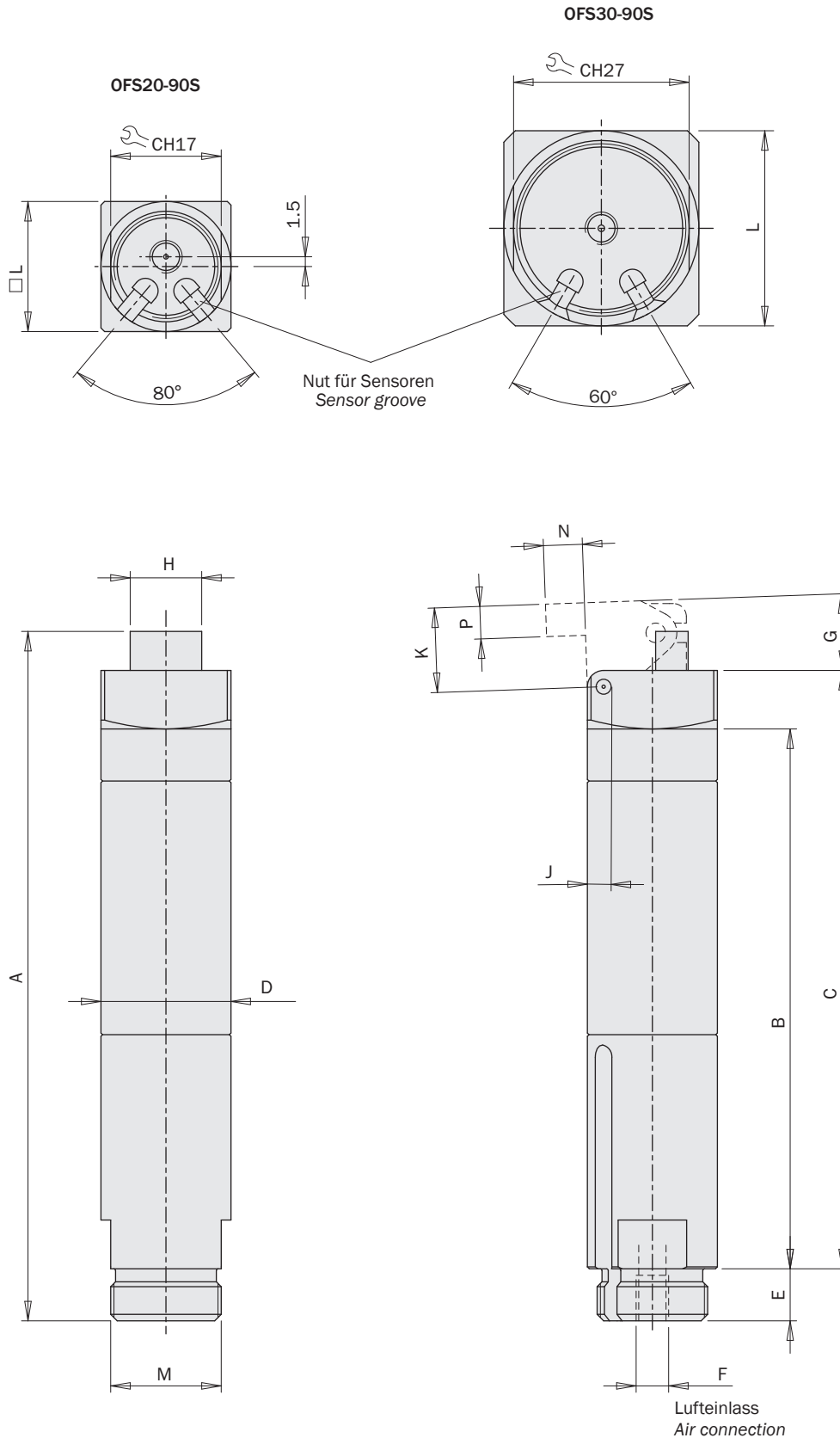
FIRST ANGLE PROJECTION

Dreheinheiten Rotary Units
 Werkzeugwechsler Quick Changer
 Profiles and holders Profiles and Brackets
 Greifer Grippers
 Linearantriebe Linear Actuators
 Aufhängungen Suspensions
 Schneidzangen Nippers
 Roboter-Kit Robot Kit
 Optionen Options
 Sensoren Sensors

Maße (mm)
Dimensions (mm)

OFS...S

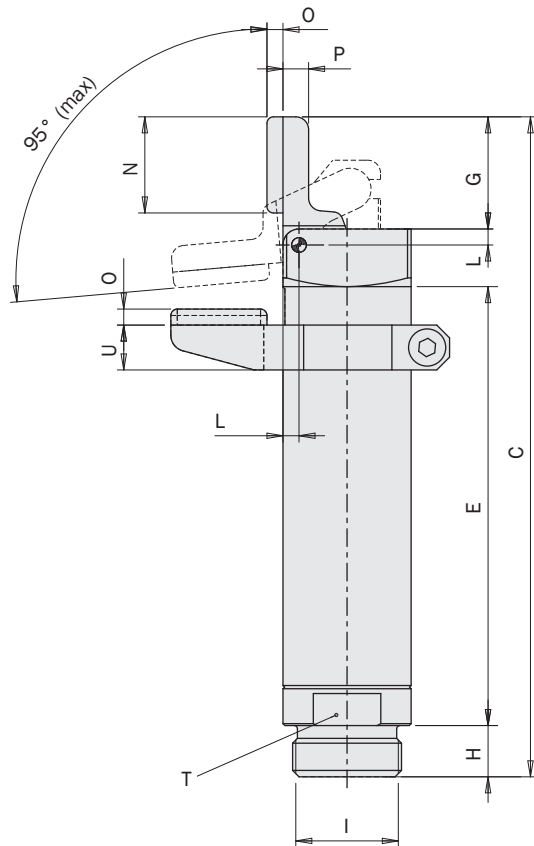
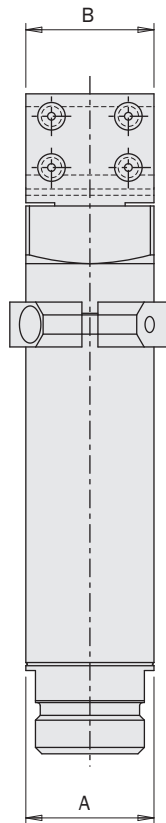
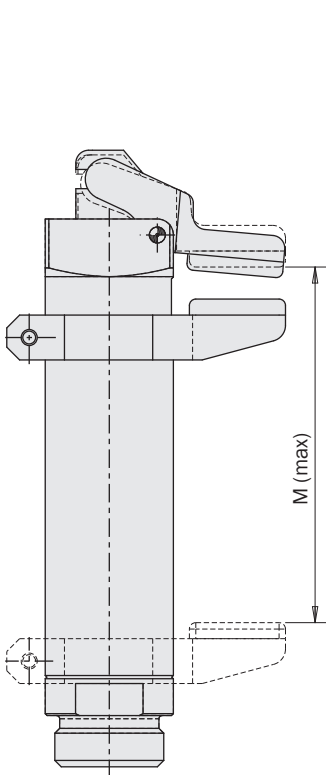
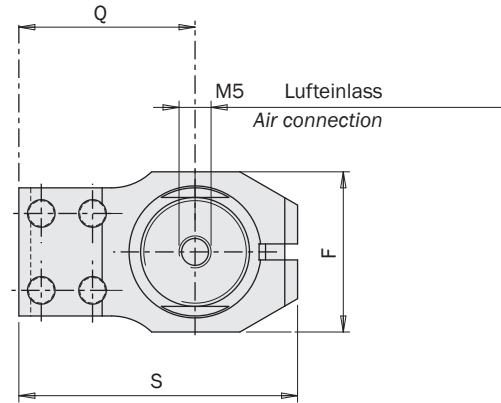
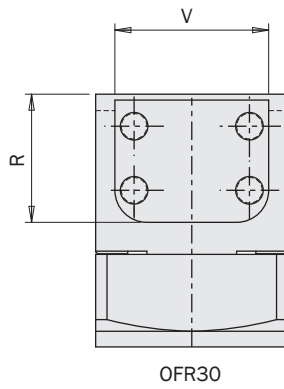
	A	B	C	D	E	F	G	H	J	K	L	M	N	P
OFS20-90S	106	83	92	Ø20	8	M5	2°	11	2.5	13	20	M17x1	6	5
OFS30-90S	159	125	137	Ø30	11	M5	2°	14	4	20	30	M27x1	11	6



Maße (mm)
Dimensions (mm)

OFR...-95G

	A	B	C	E	F	G	H	I	L	M	N	O	P	Q	R	S	T	U	V
OFR14-95G	Ø14	14	72	45.5	19	12	5.5	M12x1	2	32.5	11	2.5	3	19	-	32	12	7.5	-
OFR20-95G	Ø20	20	103	68.5	25	17.5	8	M17x1	2.5	55.5	15	2.5	4	27.5	-	43.5	17	7	-
OFR30-95G	Ø30	30	148	100	37	25.5	11	M27x1	4	84	20	3	5	40	20	63	27	9	24



FIRST ANGLE PROJECTION

Drehheiten
Rotary Units

Werkzeugwechsler
Quick Changer

Profiles and holders
Profiles and Brackets

Greifer
Grippers

Linearantriebe
Linear Actuators

Aufhängungen
Suspensions

Schneidzangen
Nippers

Roboter-Kit
Robot Kit

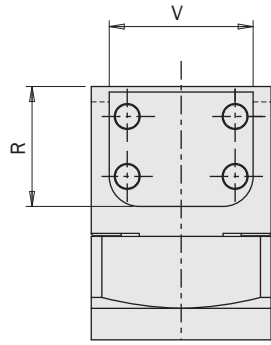
Optionen
Options

Sensoren
Sensors

Maße (mm)
Dimensions (mm)

OFR...-95SG

	A	B	C	D	E	F	G	H	I	K	L	M	N	O	P	Q	R	S	T	U	V
OFR20-95SG	Ø20	20	117.5	1.5	83	25	17.5	8	M17x1	80°	2.5	75	15	2.5	4	27.5	-	43.5	17	7	-
OFR30-95SG	Ø30	30	173	-	124.7	37	25	11	M27x1	60°	4	113	20	3	5	40	20	63	27	9	24



OFR30

