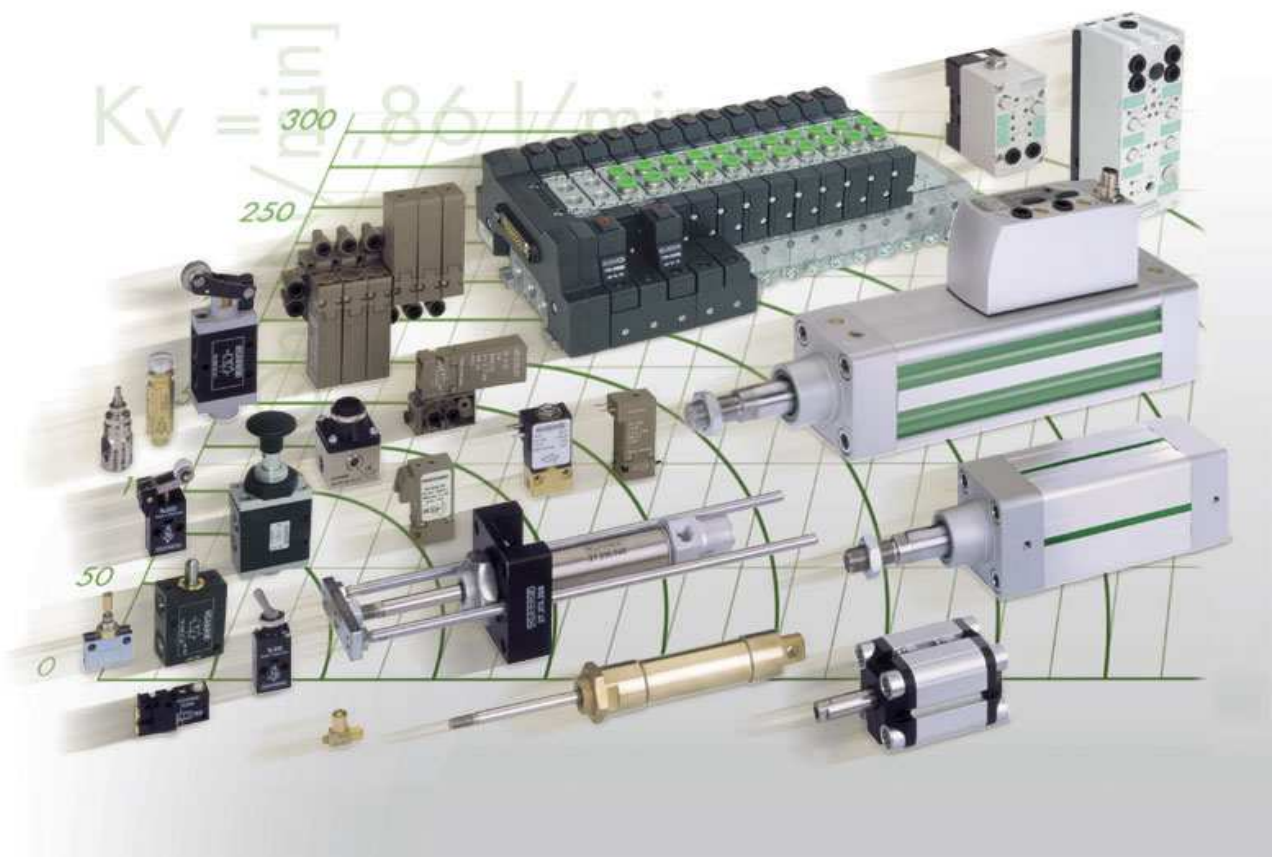


CNOMO cylinders

Ø 32 - 320 mm





This catalogue is primarily intended for design and development engineer.

It is not an indication of delivery possibilities.

The indicated data only serve the description of the product, they are not to be understood as the guaranteed quality of the product in legal terms.

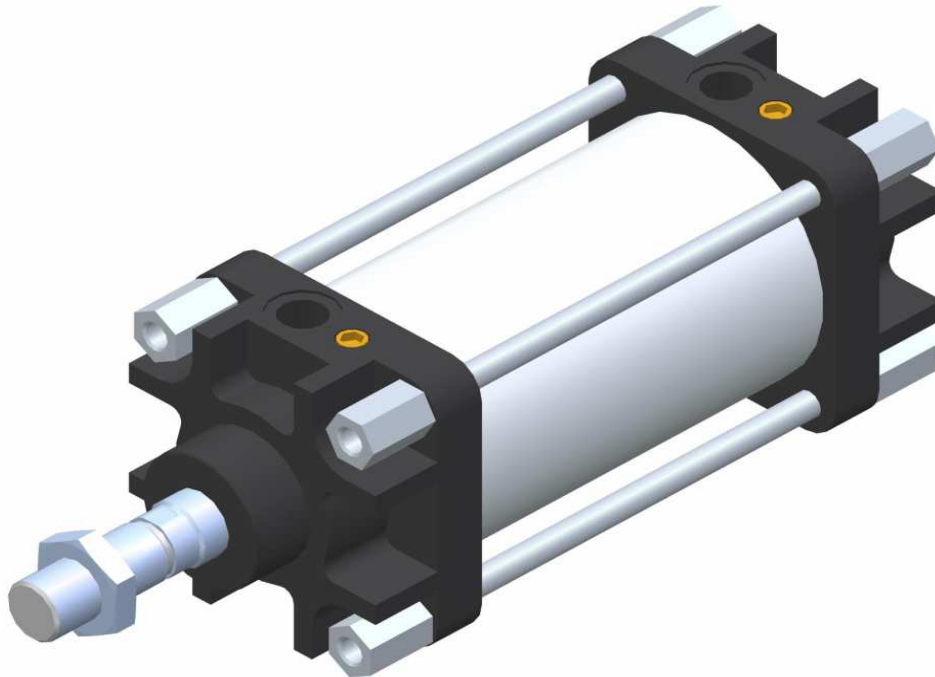
Agreements as to the quality of the product are reserved to the proper contractual relationship.

Claims of damages against us - on whatever grounds - are excluded, except in instances of deliberate intent or gross negligence on our part.

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We reserve the rights of modification, omission, error.

Technical Data



Pressure range: 1 - 10 bar

Ambient temperature range:
 NBR seals: -10°C, +80°C
 Viton® seals: -10°C, +150°C

Operating medium: compressed air, prepared

Lubricant: not necessary

Max stroke: 3000 mm

Materials:

- Tube: round anodized aluminium
- Tie-rods: galvanized steel
- Covers: aluminium die-cast (painted)
- Piston rod: C45 chromium-plated steel
(stainless steel AISI 304)
- Piston: NBR rubber block (with or without magnet)
 Viton® rubber block (Cnomo std)
 Viton® seals (Cnomo magnetic)
- Seals: NBR rubber
 Viton®

Please consider in case of Viton® seals on magnetic version, the range of temperature is limited by the magnetic ring: in this case the upper limit is 100°C.

Stroke tolerance: Ø 32 - 50 < 500 mm: + 2 mm > 500 mm: + 3,2 mm
 Ø 63 - 100 < 500 mm: + 2,5 mm > 500 mm: + 4 mm

Force at 6 bar

Ø	push [N]	pull [N]
32	470	400
40	730	590
50	1150	1000
63	1830	1590
80	2990	2720
100	4600	4190

Length of the cushions

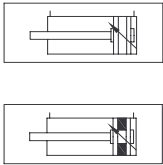
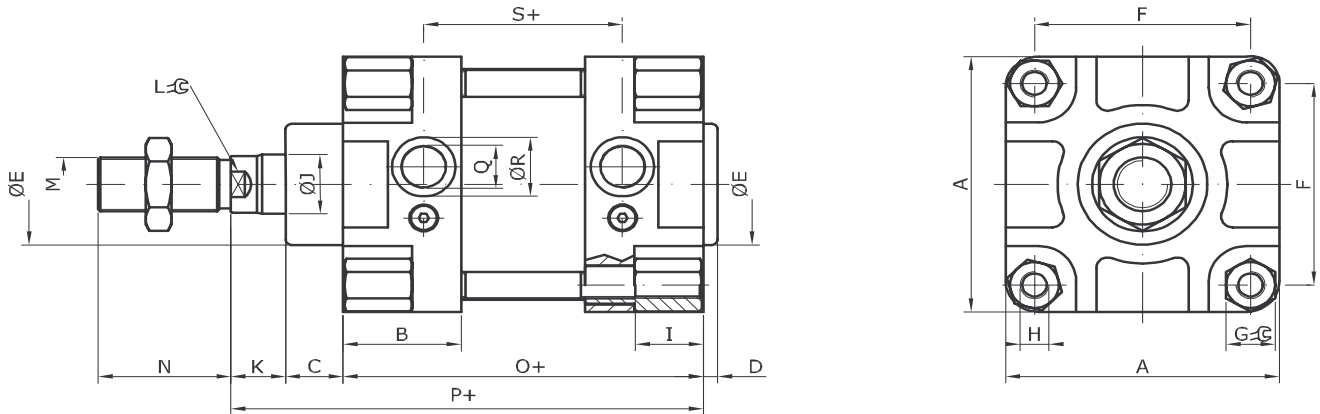
Ø	[mm]
32	28
40	28
50	32
63	32
80	40
100	40

CNOMO Cylinders

Ø 32 - 100 mm



Dimensions



Ø	A	B	C	D	ØE	F	G±	H	I	ØJ	K	L±	M	N	O	P	Q	ØR	S
32	46	25	15	5	25	33	6	M6	15,5	12	10	10	M10x1,5	20	80	105	G½"	13	59
40	52	29	15	5	32	40	6	M6	15,5	18	19	15	M16x1,5	36	110	144	G¾"	18	80
50	66	29	15	5	32	49	14	M8	20,5	18	19	15	M16x1,5	36	110	144	G¾"	18	75
63	75	34	20	5	45	59	14	M8	20,5	22	19	19	M20x1,5	46	125	164	G¾"	22	80
80	95	41	20	5	45	75	17	M10	23,5	22	19	19	M20x1,5	46	125	164	G¾"	22	68
100	115	44	20	5	55	90	17	M10	23,5	30	27	27	M27x2	63	145	192	G¾"	27	88

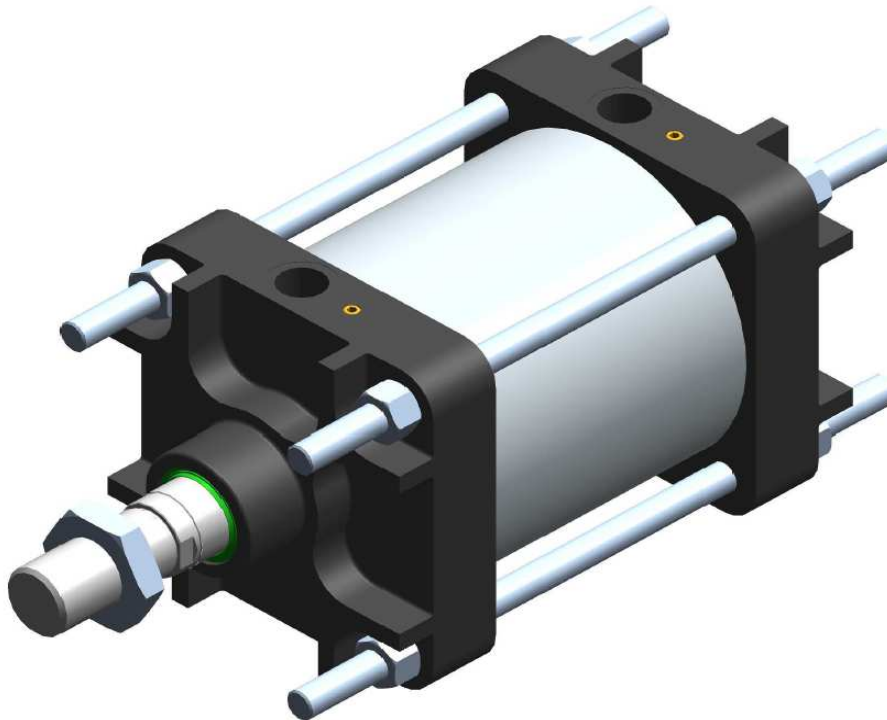
Order Code

	A.	063.	0200.	DOM
Version				
with magnetic piston	C			
without magnetic piston	A			
Piston diameter				
Ø 32		032		
Ø 40		040		
Ø 50		050		
Ø 63		063		
Ø 80		080		
Ø 100		100		
Stroke				
mm			xxxx	
Design				
double acting				DOM
through rod				DOM.01
stainless steel piston rod				DOM.04
Viton® seals				DOM.08

Special Products	A.	063.	0200.	zzzz
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zzzz = project nb. (4 digit fixed by Kuhnke)

Technical Data



Pressure range: 1 - 10 bar

Ambient temperature range:
 NBR seals: -10°C, +80°C
 Viton® seals: -10°C, +150°C

Operating medium: compressed air, prepared

Lubricant: not necessary

Max stroke: 3000 mm

Materials:

- Tube: round anodized aluminium
- Tie-rods: galvanized steel
- Covers: aluminium die-cast (painted)
- Piston rod: C45 chromium-plated steel
(stainless steel AISI 304)
- Piston: NBR rubber block (or NBR seals)
Viton® rubber block (or Viton® seals)
- Seals: NBR rubber
Viton®

Please consider in case of Viton® seals on magnetic version, the range of temperature is limited by the magnetic ring: in this case the upper limit is 100°C.

Viton® seals are not available for cylinders Ø 250 - 320.

Cylinders Ø 125 - 320 are always made with projecting tie-rods.

Accessories for cylinders Ø 250 - 320 are realized only on demand and after our evaluation.

Stroke tolerance:	Ø 125 - 200	< 500 mm: + 4 mm	> 500 mm: + 5 mm
	Ø 250 - 320	< 500 mm: + 5 mm	> 500 mm: + 7 mm

Force at 6 bar

Ø	push [N]	pull [N]
125	7200	6790
160	11760	11050
200	18440	17700
250	28840	27690
320	47260	40620

Length of the cushions

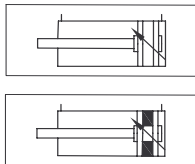
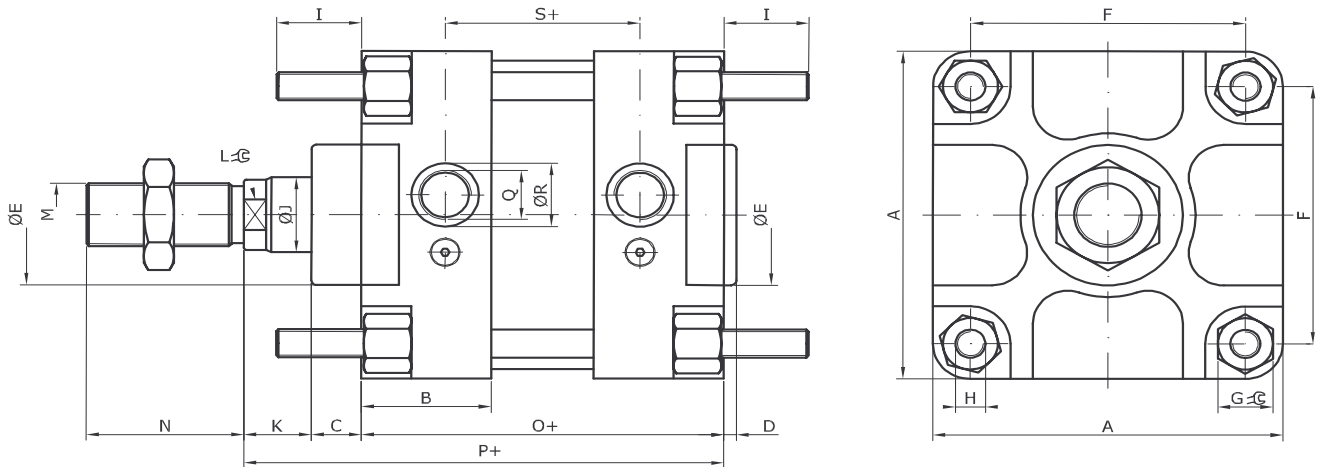
Ø	[mm]
125	35
160	45
200	45
250	50
320	-

CNOMO Cylinders

Ø 125 - 320 mm



Dimensions



Ø	A	B	C	D	ØE	F	G	H	I	ØJ	K	L	M	N	O	P	Q	ØR	S
125	140	48,5	20	5	55	110	22	M12	34	30	27	27	M27x2	63	145	192	G $\frac{1}{2}$ "	27	85
160	180	60	35	5	65	140	27	M16	42	40	15	36	M36x2	85	180	230	G $\frac{3}{4}$ "	35	102
200	220	59	35	5	65	175	27	M16	42	40	15	36	M36x2	85	180	230	G $\frac{3}{4}$ "	35	104
250	280	60	50	5	90	220	38	M20	50	50	30	41	M36x2	85	230	310	G $\frac{1}{2}$ "	35	149
320	340	60	82	5	110	270	46	M24	60	63	23	55	M36x2	90	230	335	G1"	50	170

Order Code

	A.	160.	0200.	DOM
Version				
with magnetic piston	C			
without magnetic piston	A			
Piston diameter				
Ø 125		125		
Ø 160		160		
Ø 200		200		
Ø 250		250		
Ø 320		320		
Stroke				
mm			xxxx	
Design				
double acting				DOM
through rod				DOM.01
stainless steel piston rod				DOM.04
Viton® seals				DOM.08

Special Products	A.	063.	0200.	DOM.	zzzz
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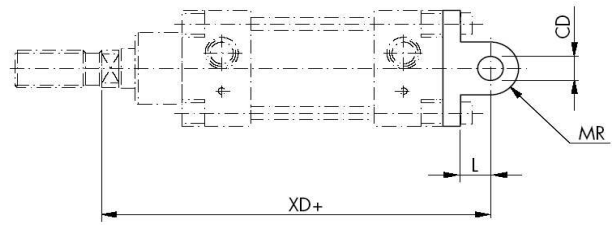
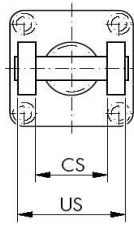
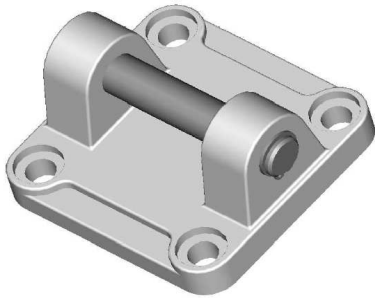
zzzz = project nb. (4 digit fixed by Kuhnke)

CNOMO Cylinders

Ø 32 - 200 mm - Accessories



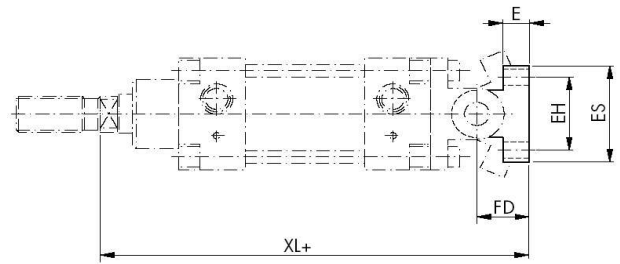
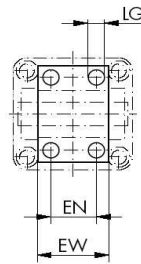
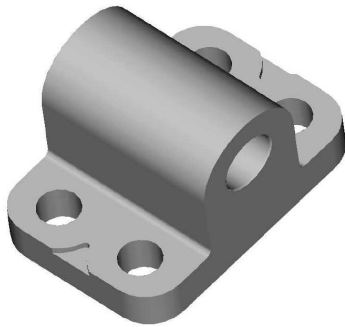
Female clevis



Order code	Ø	CS	US	L	XD	CD	MR
16.001.01	32	26	45	10	123	8	9
16.001.02	40	33	52	16	168	12	12
16.001.03	50	33	65	16	170	12	12
16.001.04	63	47	75	20	194	16	17
16.001.05	80	47	95	20	196	16	17
16.001.06	100	57	115	25	229	20	21
16.001.07	125	57	140	30	233	20	24
16.001.08	160	72	180	35	285	25	30
16.001.09	200	72	220	35	285	25	30

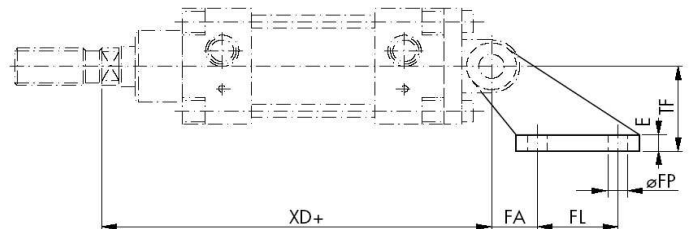
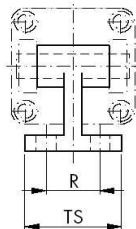
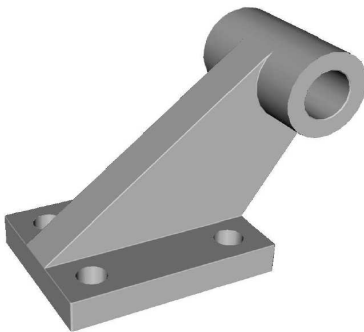
bolt and fixing screws are included

Trunnion



Order code	Ø	EW	EN	LG	XL	FD	E	EH	ES
16.003.01	32	25	-	7	141	18	8	28	40
16.003.02	40	32	16	9	194	26	10	38	52
	50	32	16	9	196	26	10	38	52
16.003.04	63	46	25	11	228	34	12	54	75
	80	46	25	11	230	34	12	54	75
16.003.06	100	56	32	14	270	41	16	90	115
	125	56	32	14	274	41	16	90	115
16.003.08	160	71	43	18	340	55	20	150	180
	200	71	43	18	340	55	20	150	180

Square angle trunnion



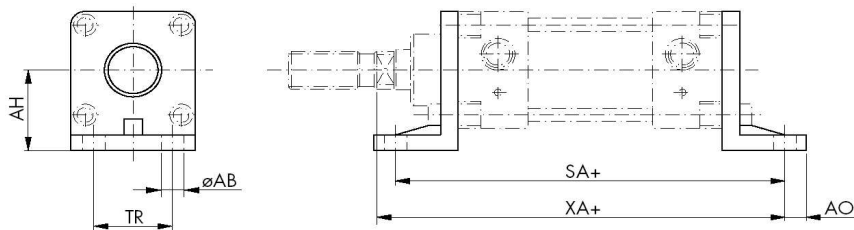
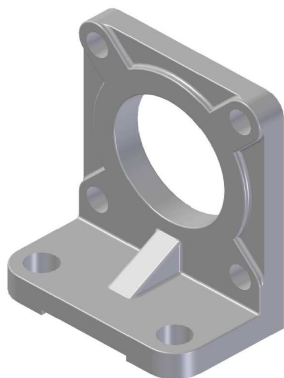
Order code	Ø	TS	R	FP	XD	FA	FL	E	TF
16.004.01	32	41	25	7	123	18	20	8	32
16.004.02	40	52	32	9	168	25	32	10	45
	50	52	32	9	170	25	32	10	45
16.004.04	63	63	40	11	194	32	50	12	63
	80	63	40	11	196	32	50	12	63
16.004.06	100	80	50	14	229	40	70	16	90
	125	80	50	14	233	40	70	16	90
16.004.08	160	110	63	18	285	50	110	20	140
	200	110	63	18	285	50	110	20	140

CNOMO Cylinders

Ø 32 - 200 mm - Accessories



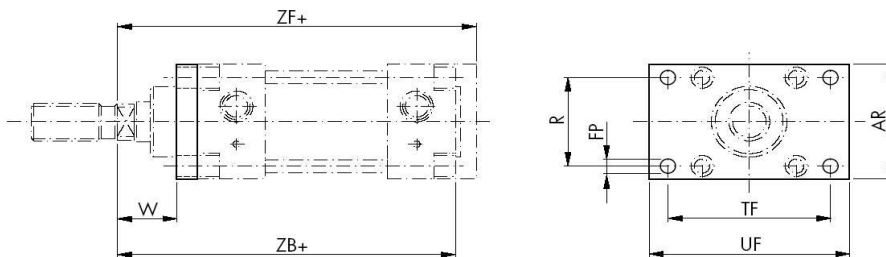
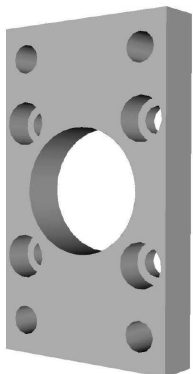
Mounting bracket



Order code	Ø	AH	TR	AB	AO	SA	XA
16.005.01	32	32	28	9	8	134	132
16.005.02	40	36	36	9	8	164	171
16.005.03	50	45	45	11	8	180	179
16.005.04	63	50	55	11	10	195	199
16.005.05	80	63	70	14	12	211	207
16.005.06	100	73	90	14	12	231	235
16.005.07	125	90	100	18	16	249	244
16.005.08	160	115	130	22	18	304	292
16.005.09	200	135	170	22	28	304	292

fixing screws are included
order code is referred to one piece

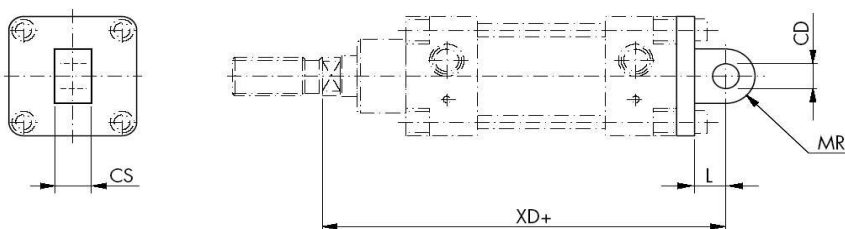
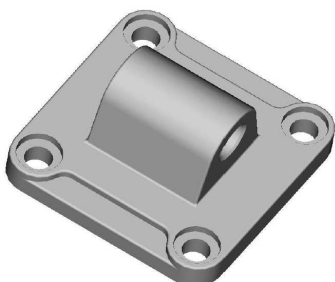
Mounting plate



Order code	Ø	W	R	FP	TF	UF	AR	ZF	ZB
16.006.01	32	17	33	9	68	80	45	113	105
16.006.02	40	26	40	9	78	90	52	152	144
16.006.03	50	24	49	1	94	110	65	154	144
16.006.04	63	29	59	1	104	120	75	174	164
16.006.05	80	27	75	14	130	150	95	176	164
16.006.06	100	39	90	14	150	170	115	204	192
16.006.07	125	31	110	18	180	205	140	208	192
16.006.08	160	30	140	22	228	260	180	250	230
16.006.09	200	30	175	22	228	300	220	250	230

fixing screws are included

Male clevis



Order code	Ø	CS	CD	L	MR	XD
16.002.01	32	26	10	12	10	125
16.002.02	40	28	12	15	12	167
16.002.03	50	32	12	17	12	171
16.002.04	63	40	16	20	16	194
16.002.05	80	50	16	20	16	196
16.002.06	100	60	20	25	20	229
16.002.07	125	70	25	30	25	238
16.002.08	160	90	30	35	30	285
16.002.09	200	90	30	35	30	285

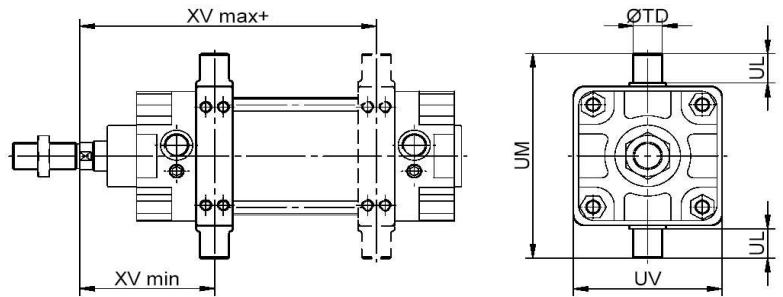
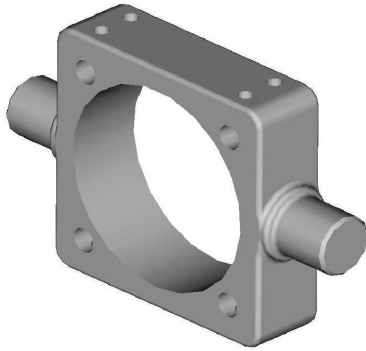
fixing screws are included
this product is covered by Cetop std

CNOMO Cylinders

Ø 32 - 200 mm - Accessories



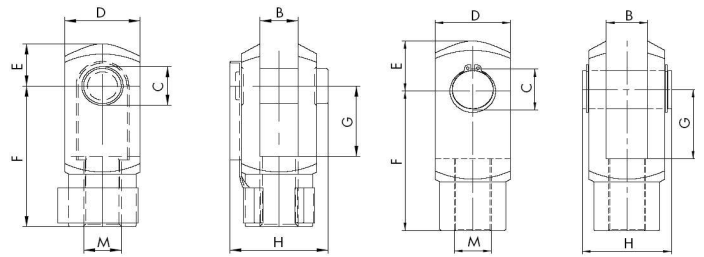
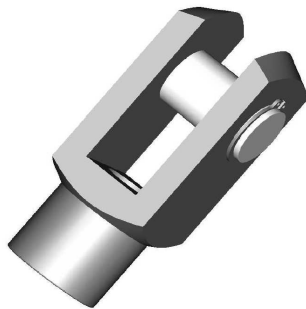
Intermediate trunnion



Order code	Ø	TD	UL	UM	UV	XV _{min}	XV _{max+}
16.017.01	32	12	12	74	45	57,5	72,5
16.017.02	40	16	16	95	55	73	105
16.017.03	50	16	16	105	65	73	105
16.017.04	63	20	20	130	80	85,5	117,5
16.017.05	80	20	20	148	100	92,5	110,5
16.017.06	100	25	25	181	124	106	133
16.017.07	125	25	25	209	152	111,5	127,5
16.007.08	160	32	32	262	190	130	150
16.007.09	200	32	32	312	240	129	151

adjustable
 Ø 160-200 we recommend to assemble intermediate trunnion on threaded tie-rods and fix it with nuts

Yoke



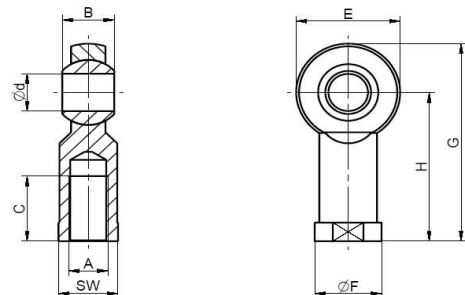
Ø 32 - 125

Ø 160 - 200

Order code	Ø	M	B	C	D	E	F	G	H
16.008.01	32	M10x1,5	11	8	22	9	36	16	28
16.008.02	40	M16x1,5	18	12	26	13	51	25	44
	50								
16.008.03	63	M20x1,5	22	16	34	17	63	33	53
	80								
	100								
16.008.04	125	M27x2	30	20	42	20	85	40	73
	160								
16.008.05	200	M36x2	40	25	50	25	115	40	95

clips (Ø 32-125) and pins (Ø 160-200) are included

Rod end - spherical bearing



Order code	Ø	A	d	B	E	F	H	G	C	SW
16.009.01	32	M10x1,5	10	14	28	19	43	57	20	17
18.009.03	40	M16x1,5	16	21	42	27	64	85	28	22
	50									
18.009.04	63	M20x1,5	20	25	50	34	77	102	33	30
	80									
18.009.05	100	M27x2	30	37	70	50	110	145	51	41
	125									
18.009.06	160	M36x2	35	43	80	58	125	165	56	50
	200									

CNOMO Cylinders

Ø 32 - 100 mm - Accessories



Position transmitters

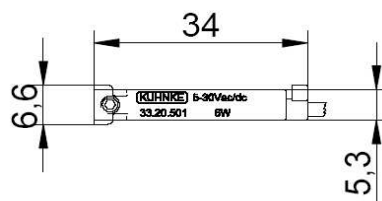


With cable 2 m length

Reed 2 pole	33.20.601
Reed 3 pole	33.20.501
Electronic	33.20.701

With socket M8, cable 300 mm length

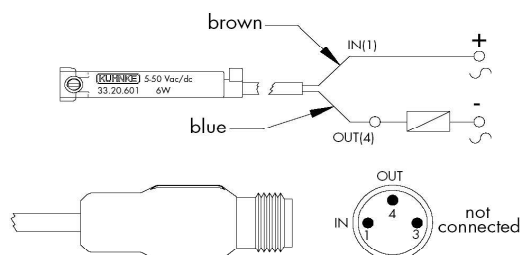
Reed 2 pole	33.20.681
Reed 3 pole	33.20.581
Electronic	33.20.781



Housing material: plastic
 Protection class: IP67
 Ambient temperature range: -5°C ÷ +75°C
 Status indicator: LED

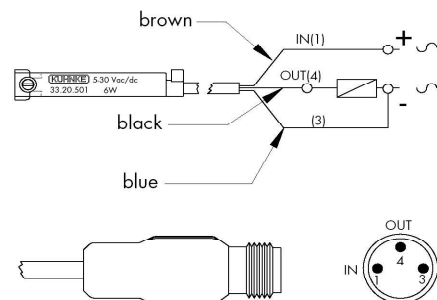
Reed 2 pole

Switching output:	N.O.
Cable:	2 x 0,14 mm ²
Switching capacity:	max 6 W
Switching voltage:	5-50 V AC/DC
Switching current:	max 200 mA
Voltage drop:	3 V
Switching time:	0,6 ms
Switching rate:	max 400 Hz
Service life:	10 ⁷ switchings, depending on the load



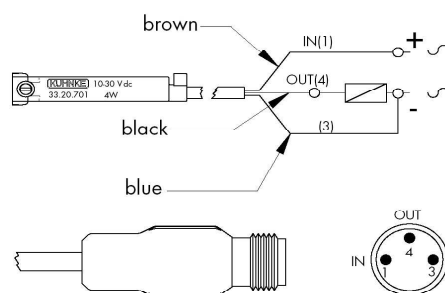
Reed 3 pole

Switching output:	N.O.
Cable:	3 x 0,14 mm ²
Switching capacity:	max 6 W
Switching voltage:	5-30 V AC/DC
Switching current:	max 500 mA
Voltage drop:	0,1 V
Switching time:	0,6 ms
Switching rate:	max 400 Hz
Service life:	10 ⁷ switchings, depending on the load

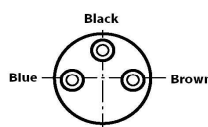
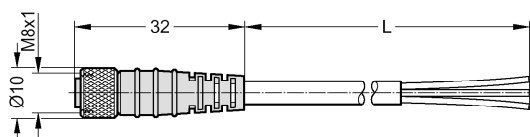


Electronic

Switching output:	PNP N.O.
Cable:	3 x 0,14 mm ²
Switching capacity:	max 4 W
Switching voltage:	5-30 V DC
Switching current:	max 200 mA
Voltage drop:	0,7 V
Switching time:	0,8 µs
Switching rate:	max 1 kHz
Service life:	10 ¹¹ switchings, depending on the load



M8 Connectors (female-straight)



Order code	L
PL08B3.V250.30	3 m
PL08B3.V250.50	5 m

CNOMO Cylinders

Ø 32 - 200 mm - Accessories

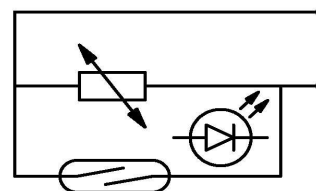
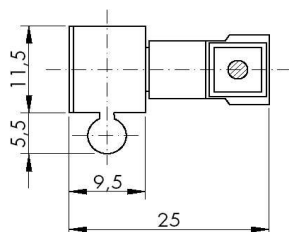
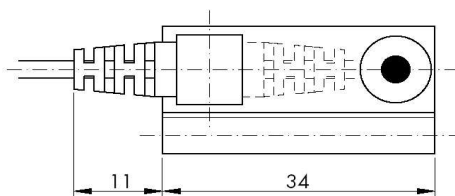
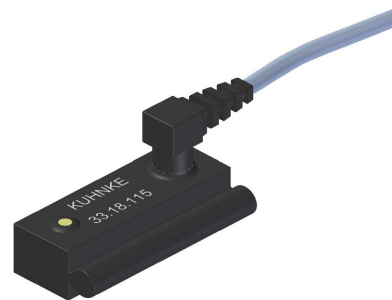


Position transmitter

Reed 2 pole with plug connector

33.18.115

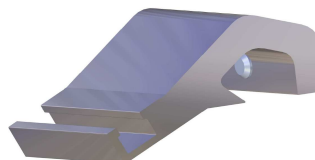
Switching output: N.O.
 Switching capacity: max 10 VA
 Switching voltage: 3-230 V AC/DC
 Switching current: max 500 mA
 Voltage drop: -
 Switching time: 0,5 ms
 Service life: 10⁷ switchings, depending on the load
 Housing material: plastic
 Protection class: IP67
 Ambient temperature range: -20°C ÷ +85°C
 Status indicator: LED



Fastening clamps

a) to assemble position transmitters 33.20.xxx

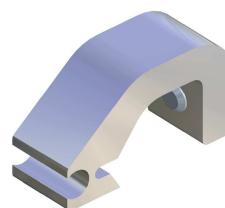
This fastening clamp permits to assemble the position transmitters 33.20.xxx only on Cnomo cylinders from Ø 32 to Ø 100



Order code	Ø
33.008.16.01	32
	40
	50
	63
33.008.16.05	80
	100

a) to assemble position transmitter 33.18.115

This fastening clamp permits to assemble the position transmitter 33.18.115 on all Cnomo cylinders from Ø 32 to Ø 200



Order code	Ø
33.009.08	32
	40
	50
	63
33.008.09	80
	100
	125
	160
	200

Seals kit

Cnomo standard

Order code	Ø
SG.032A.DOM	32
SG.040A.DOM	40
SG.050A.DOM	50
SG.063A.DOM	63
SG.080A.DOM	80
SG.100A.DOM	100
SG.125A.DOM	125
SG.160A.DOM	160
SG.200A.DOM	200
SG.250A.DOM	250
SG.320A.DOM	320

Cnomo with magnetic piston

Order code	Ø
SG.032C.DOM	32
SG.040C.DOM	40
SG.050C.DOM	50
SG.063C.DOM	63
SG.080C.DOM	80
SG.100C.DOM	100
SG.125C.DOM	125
SG.160C.DOM	160
SG.200C.DOM	200
SG.250C.DOM	250
SG.320C.DOM	320

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