CE
CYLINDERS SERIES

WELDED CYLINDERS

GRICES HYDRAULIC CYLINDERS

CE CYLINDERS SERIES

WELDED CYLINDERS

The **CE series**, welded cylinders with ample guides and accurate processing, is suitable for the usage on industrial and mobile machines, for applications without cyclical fatigue stress.

The choice of selected materials, the hydraulic and electronic controls of 100% of all cylinders produced and the quality of the means of production, allow to reach high standards of quality, reliability and enduring product performance.
The welding process is carried out with the help of special machines by our qualified and certified staff.

The seals used, supplied by premium suppliers, grant high performance and international availability.
The wide range of seals, allows us to offer cylinders for applications with different kinds of hydraulic fluids, speed, frequency and operating temperature.

Technical specifications:

- Nominal pressure16 MPa
- Maximum pressure 25 MPa
- Bore 40-200 mm
- Stroke up to 4000 mm
- Single or double rod
- 2 rod diameter per bore
- 8 mounting styles

Options:

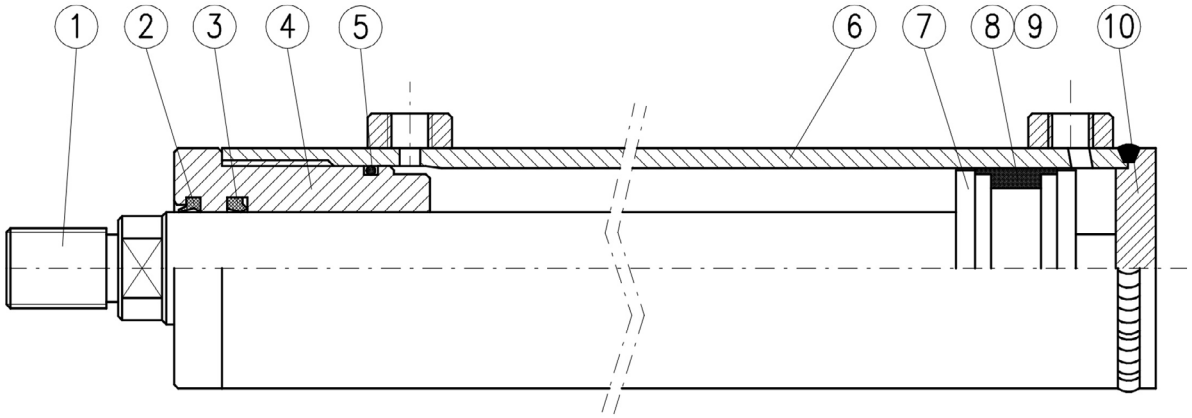
- Integrated position transducer with analogue output signal: 4/20 mA or 0/10 V (contact our technical department)
- Air bleeds
- Rod treatment : chromed, induction hardened and chromed, nickel-chromed

EPC Cylinder configurator

This is an innovative tool that allows the client to configure CE cylinders in a rapid and intuitive way, guiding the technician through the choices of all the options available.

Once the cylinder code is defined, the EPC software provides 2D, 3D and PDF drawings, and gives the user the possibility to save projects and request offers. With the complete access, reserved to the purchasing department, it is possible to make orders directly. For all orders received through EPC an extra discount will be applied.

Login at: http://configuratore.grices.it/



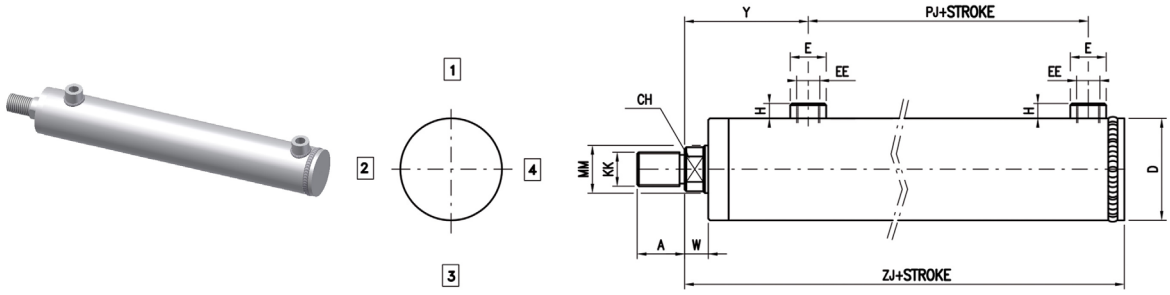
N°	ITEM	MATERIAL
1	Rod	Chromium-plated steel
2	Scraper	Polyurethane
3	Rod seal	Polyurethane
4	Guide	Cast iron
5	O-Ring + PBK	Nitrile rubber / Polyurethane
6	Body	Steel
7	Piston	Steel
8	Piston seal	Nitrile rubber
9	Guide rings	Acetal resin
10	Rear head	Steel

Mounting style

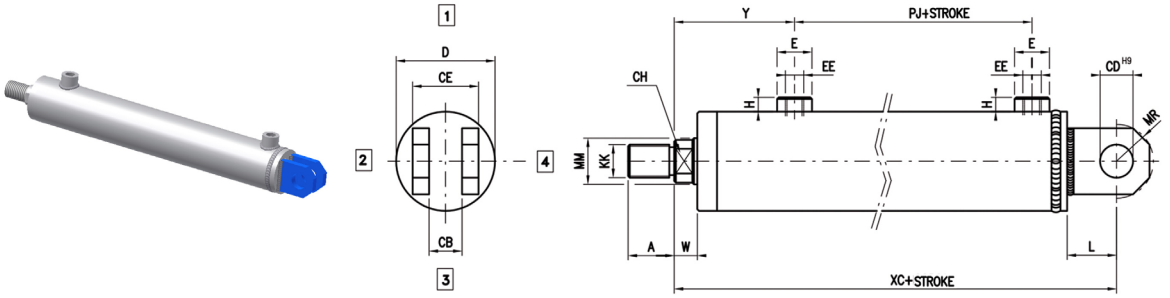
EB	FA	FP	PI	CM	CF	CS
						

OI


EB Base

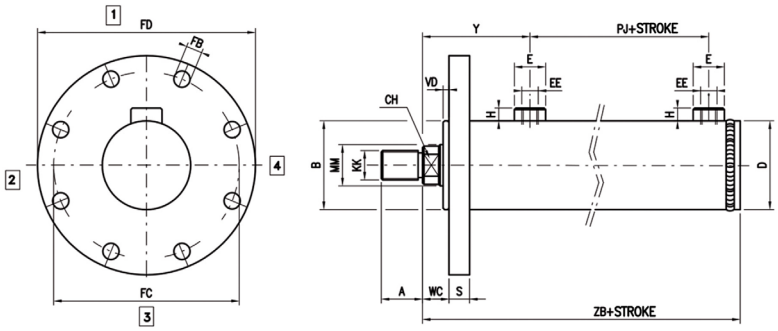


CF Female hinge

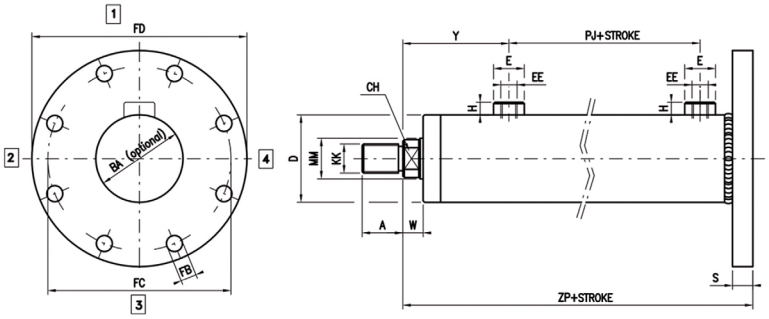


BORE	MM Rod	CH	KK	A	CB	CD	CE	D	E	EE	H	L	MR	PJ	W	ZJ	XC	Y
40	22	18	M16x1,5	22	15	15	31	50	25	3/8”	16	25	16,5	48,5	13	130	155	64
	28	22	M20x1,5	28														
50	28	22	M20x1,5	28	20	20	40	60	25	3/8”	16	30	20	52	14	143	173	73
	36	30	M27x2	36														
63	36	30	M27x2	36	25	25	49	73	30	1/2”	18	35	25	49	16	150	185	79
	45	39	M33x2	45														
80	45	39	M33x2	45	30	30	60	95	30	1/2”	18	45	32	56	18	173	218	94
	56	48	M42x2	56														
100	56	48	M42x2	56	40	40	80	115	35	3/4”	20	55	42	57	20	190	245	105
	70	62	M48x2	63														
125	70	62	M48x2	63	50	50	90	140	35	3/4”	20	70	50	75	23	228	298	123
	90	80	M64x3	85														
160	90	80	M64x3	85	60	60	130	180	45	1”	25	80	58	76	25	260	340	140
	110	100	M80x3	95														
200	110	100	M80x3	95	70	70	140	230	45	1”	25	90	68	111	30	290	380	160
	140	128	M100x3	112														

FA Front flange

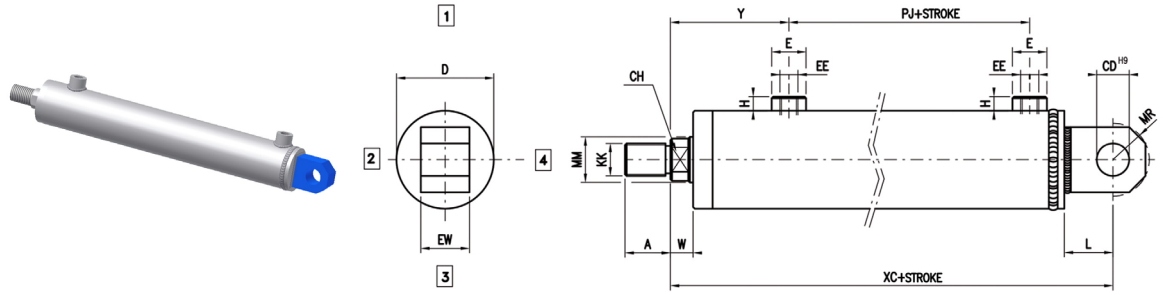


FP Rear flange

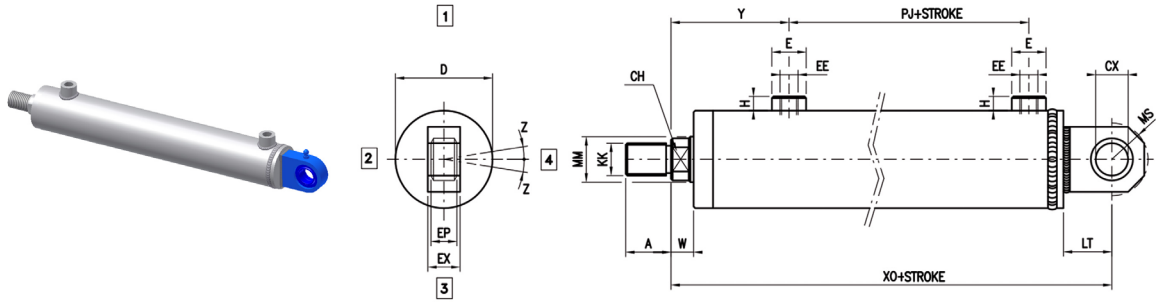


BORE	MM Rod	CH	KK	A	B	BA	D	E	EE	FB	FC	FD	H	PJ	S	VD	W	WC	Y	ZB	ZP
40	22	18	M16x1,5	22	50	50	50	25	3/8”	9	106	124	16	48,5	14	3	13	16	64	130	139
	28	22	M20x1,5	28																	
50	28	22	M20x1,5	28	60	60	60	25	3/8”	11	126	148	16	52	14	4	14	18	73	143	150
	36	30	M27x2	36																	
63	36	30	M27x2	36	70	70	73	30	1/2”	13,5	145	172	18	49	14	4	16	20	79	150	155
	45	39	M33x2	45																	
80	45	39	M33x2	45	85	85	95	30	1/2”	17,5	165	200	18	56	20	4	18	22	94	173	183
	56	48	M42x2	56																	
100	56	48	M42x2	56	106	106	115	35	3/4”	22	200	244	20	57	25	5	20	25	105	190	200
	70	62	M48x2	63																	
125	70	62	M48x2	63	132	132	140	35	3/4”	22	235	280	20	75	30	5	23	28	123	228	243
	90	80	M64x3	85																	
160	90	80	M64x3	85	160	160	180	45	1”	22	280	324	25	76	35	5	25	30	140	273	275
	110	100	M80x3	95																	
200	110	100	M80x3	95	200	200	230	45	1”	26	340	390	25	111	40	5	30	35	160	308	305
	140	128	M100x3	112																	

CM Male hinge

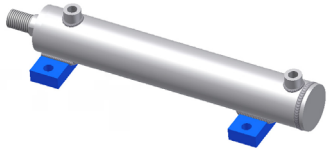


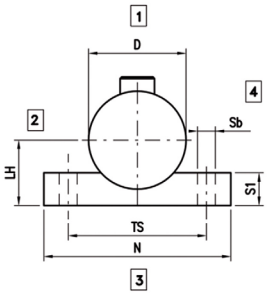
CS Joint hinge

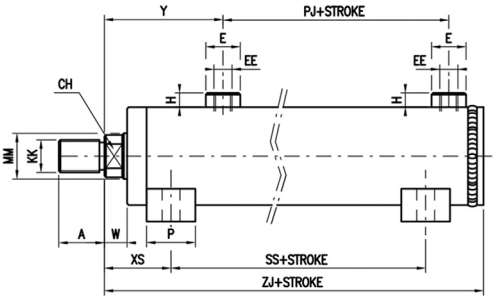


BORE	MM Rod	CH	KK	A	CB	CX	D	E	EE	EW	EX	EP	H	L	LT	MR	MS	PJ	W	XC	XO	Y	Z
40	22	18	M16x1,5	22	15	20	50	25	3/8”	28	19	16	16	25	38	16,5	25	48,5	13	155	168	64	9°
	28	22	M20x1,5	28																			
50	28	22	M20x1,5	28	20	20	60	25	3/8”	30	19	16	16	30	38	20	25	52	14	173	181	73	9°
	36	30	M27x2	36																			
63	36	30	M27x2	36	25	25	73	30	1/2”	36	23	20	18	35	45	24,5	27,5	49	16	185	195	79	7°
	45	39	M33x2	45																			
80	45	39	M33x2	45	30	30	95	30	1/2”	42	28	22	18	45	51	31,5	32,5	56	18	218	224	94	6°
	56	48	M42x2	56																			
100	56	48	M42x2	56	40	40	115	35	3/4”	56	35	28	20	55	69	42	50	57	20	245	259	105	7°
	70	62	M48x2	63																			
125	70	62	M48x2	63	50	50	140	35	3/4”	68	40	35	20	70	88	50	61,5	75	23	298	316	123	6°
	90	80	M64x3	85																			
160	90	80	M64x3	85	60	60	180	45	1”	80	50	44	25	80	100	58	70	76	25	340	360	140	6°
	110	100	M80x3	95																			
200	110	100	M80x3	95	70	70	230	45	1”	85	55	49	25	90	115	68	82	111	30	380	405	160	6°
	140	128	M100x3	112																			

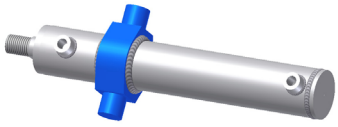
PI Feet

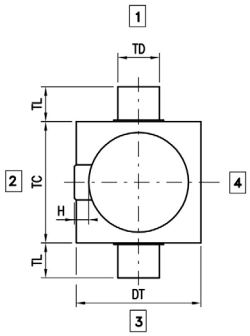


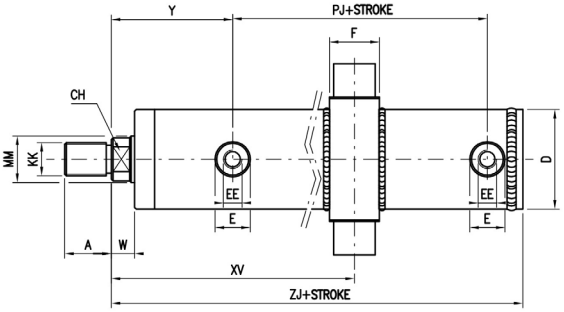




OI Trunnion







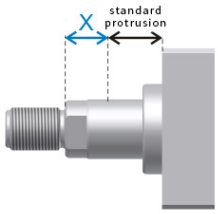
BORE	MM Rod	CH	KK	A	D	DT	E	EE	F	H	LH	N	P	PJ	Sb	SS	S1	TC	TD	TL	TS	W	XS	XVmin	XVmax	Y	ZJ
40	22	18	M16x1,5	22	50	70	25	3/8”	30	16	35	100	20	48,5	11	44	16	65	20	15	75	13	35	107	70 + stroke	64	130
	28	22	M20x1,5	28																							
50	28	22	M20x1,5	28	60	80	25	3/8”	35	16	40	110	30	52	13	45	18	75	25	20	85	14	40	119	80 + stroke	73	143
	36	30	M27x2	36																							
63	36	30	M27x2	36	73	90	30	1/2”	40	18	48	130	35	49	15	59	20	100	30	25	100	16	45	129	78 + stroke	79	150
	45	39	M33x2	45																							
80	45	39	M33x2	45	95	115	30	1/2”	50	18	60	160	40	56	17	69	22	115	40	35	125	18	50	149	95 + stroke	94	173
	56	48	M42x2	56																							
100	56	48	M42x2	56	115	135	35	3/4”	60	20	74	185	50	57	19	77	25	145	50	40	148	20	55	157	89 + stroke	105	190
	70	62	M48x2	63																							
125	70	62	M48x2	63	140	160	35	3/4”	70	20	90	240	70	75	25	82	30	170	60	50	190	23	70	173	113 + stroke	123	228
	90	80	M64x3	85																							
160	90	80	M64x3	85	180	213	45	1”	80	25	115	295	70	76	28	103	35	220	70	60	245	25	75	220	136 + stroke	140	273
	110	100	M80x3	95																							
200	110	100	M80x3	95	230	290	45	1”	90	25	155	380	100	111	39	143	45	270	80	70	311	30	100	2 2 5	156 + stroke	160	308
	140	128	M100x3	112																							

EXAMPLE OF ORDER ACRONYM

CE/50/28/530/OI0A0Q1R100XV...

CHARACTERISTIC	DESCRIPTION	SYM.	EXAMPLE
SERIES	Welded cylinders	CE	**CE**/
BORE	Indicate in mm		CE/**50**/
ROD	Indicate in mm		CE/50/**28**/
STROKE	Indicate in mm		CE/50/28/**530**/
EXECUTION	Base	EB	CE/50/28/530/**OI**
	Front flange	FA	
	Rear flange	FP	
	Feet	PI	
	Female hinge	CF	
	Male hinge	CM	
	Joint hinge	CS	
	Intermediate trunnion	OI	
SPACER	None	0	CE/50/28/530/OI**0**
	50 mm	1	
	100 mm	2	
	150 mm	3	
	200 mm	4	
SEALS	elastomer + nitrile (low pressure sealing)	A	CE/50/28/530/OI0**A**
ROD END	Type M (standard)	0	CE/50/28/530/OI0A**0**
	Type F *(request dim. to Technical Dept.)*	F	
FRONT HEAD			
POS. OIL PORTS	Side **1** / Side **2** / Side **3** / Side **4**		CE/50/28/530/OI0A0**Q1**
REAR HEAD			
POS. OIL PORTS	Side **1** / Side **2** / Side **3** / Side **4**		CE/50/28/530/OI0A0**R1**
*EXTRA ROD X QUOTE	Indicate mm		CE/50/28/530/OI0A0R1**0**
XV QUOTE	Indicate mm (only version OI)		CE/50/28/530/OI0A0R10**XV...**

** Specify the possible extra-rod (X) size in addition to the standard rod protrusion:*



Login at: http://configuratore.grices.it/

Configure your cylinder in a quick and intuitive way choosing all the available options.

Note

The indicated operating pressures are efficient for smooth applications without blows. For extreme loads or high operating pressures with high frequency, is necessary to use mounting styles and thread-rod links designed to be stress-resistant.
For further information contact our Technical Department.