



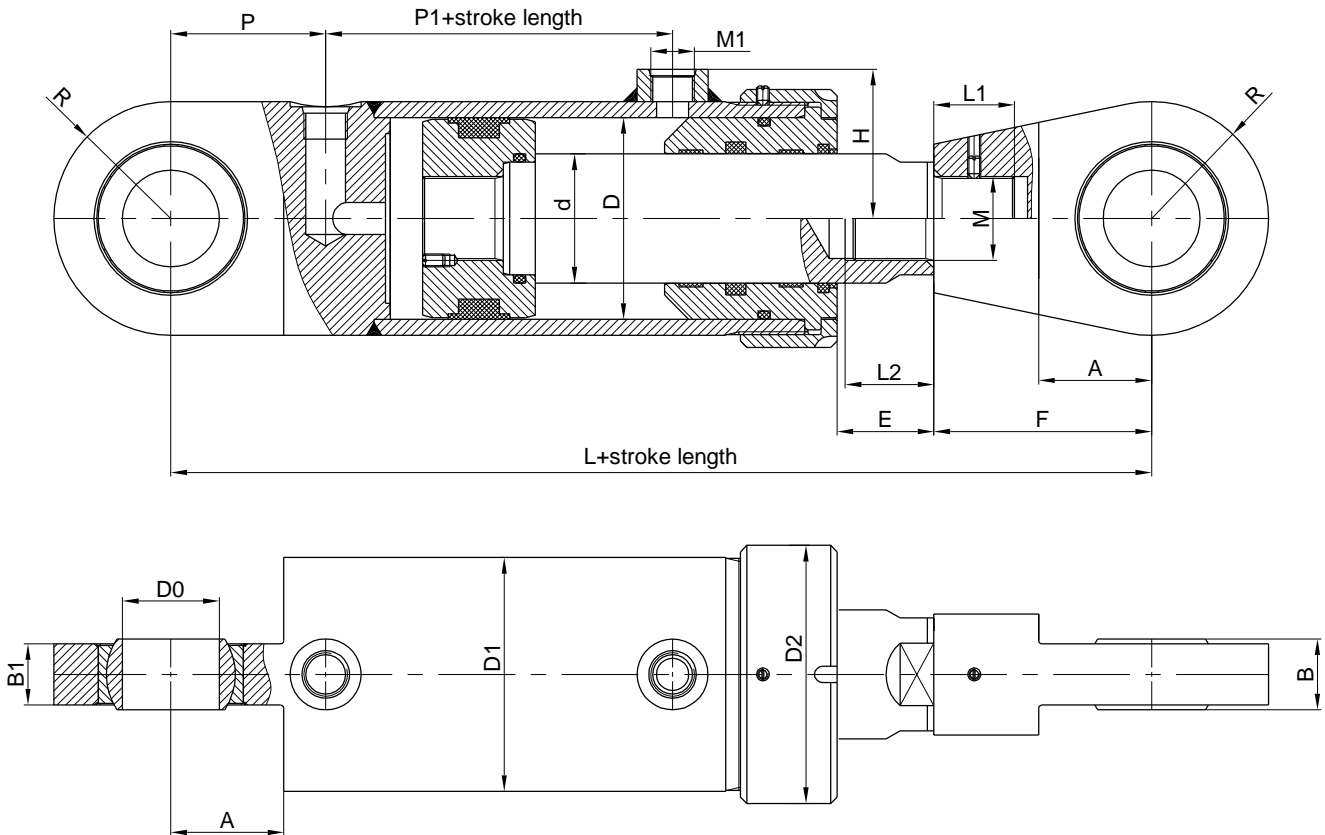
Przedsiębiorstwo Innowacyjno-Wdrożeniowe

**Wamet Sp. z o.o.**

ul. Inwalidów 1, 85-727 Bydgoszcz, Polska

tel./fax 0048 52 361 61 10, e-mail: biuro@wamet.pl

## Hydraulic cylinder CB type with reversible operation



### 1. Specification.

Hydraulic cylinders CB type with reversible operation are assigned to apply in different machines and devices. Units are characterized by strong, stiff and uncomplicated design, which guarantee unailing and long-lasting operation at hard conditions.

### 2. Features:

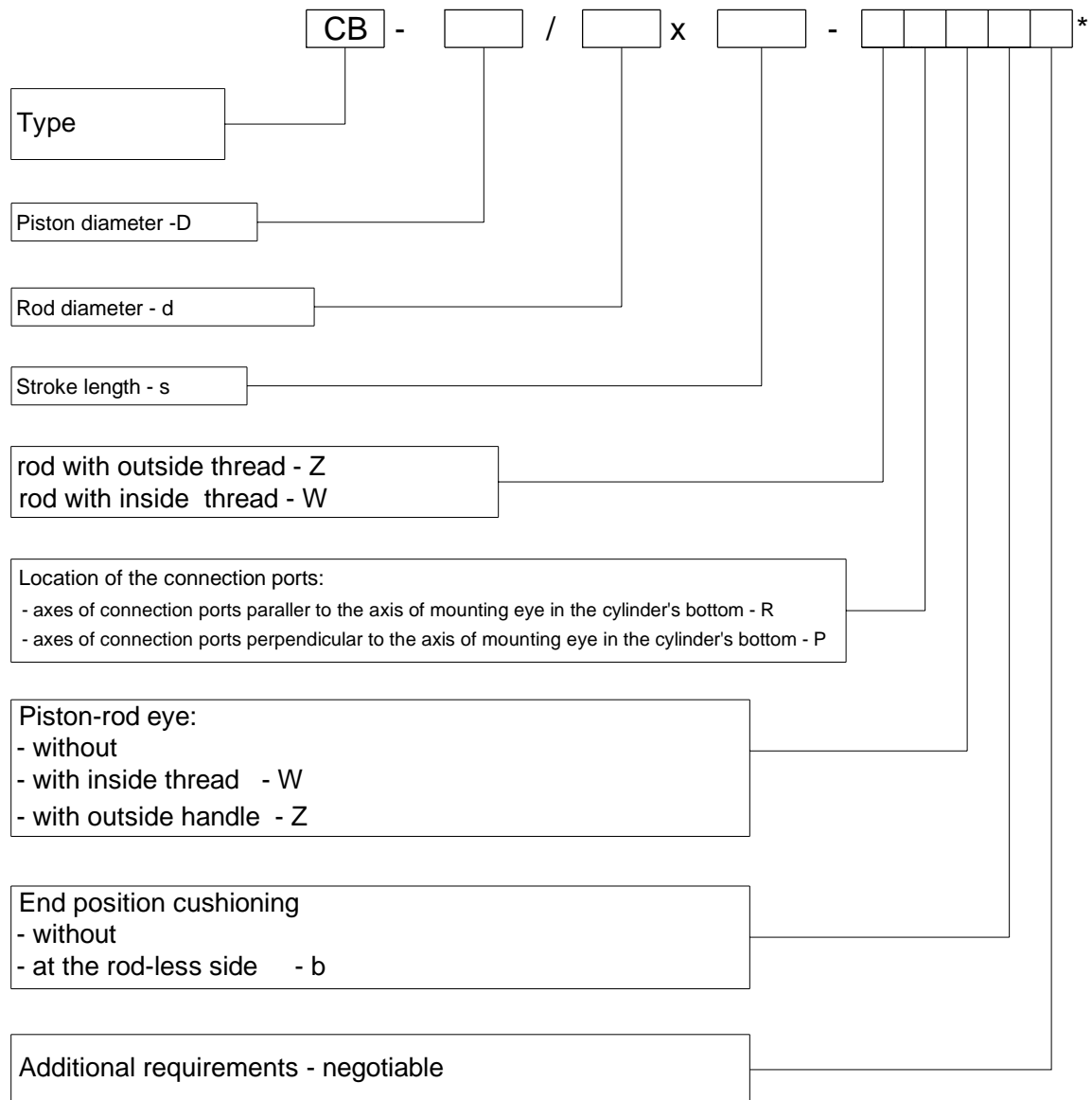
- a) nominal pressure: 250 bar,
- b) pressure fluid temperature range: -25 .. +80 °C
- c) pressure fluid: hydraulic oils , ex. HL-46,
- d) viscosity range: (2,8 - 380) cSt
- e) max degree of contamination of the pressure fluid: 20/18/15 acc. to ISO 4406
- f) max stroke velocity: 0,6[m/s],
- g) range of piston diameters: 25 - 280[mm],
- h) efficiency: 0,95,
- i) stroke lengths: negotiable
- j) connection ports according to ISO 6149 or ISO 1179.

### 3. Dimensions:

D	d	A	B	B1	D0	D1	D2	E	F	H	L	M1	P	P1	R	M	L1	L2	Pushing force at 250 bar [kN]	Pulling force at 250 bar [kN]	Mass in at 0 mm stroke length [kg]	Mass $\Delta m$ [kg/mm]
25	12	16	9	7	10	35	40	9.5	43	33.5	183	M12x1.5	28	61.5	17.5	M10x1	19	-	12	9	1.1	0.0045
	18									188			59.5							6		0.0057
32	18	20	10	8	12	42	50	14	50	37	205	M12x1.5	31	63.5	21	M14x1.5	21	-	20	13	1.8	0.0065
	22									212			62.5							10		0.0075
40	22	25	16	14	20	50	58	18	53	41	228	M16x1.5	40	65	25	M16x1.5	20	22	31	21	2.5	0.0117
	28																			16		0.0136
50	28	28	20	18	25	65	71	21	60	50.5	259	M20x1.5	48	74	32.5	M22x1.5	22	25	49	33	4.4	0.0154
	32																			28		0.0169
	36																			23		0.0186
	32	38	25	22	35	78	88	24	79	57	305	M22x1.5	57	80	39	M27x2	30	32	77	57	8.3	0.0193
63	36																			52		0.0210
	45																			38		0.0255
	36	45	28	24	40	95	104	28	90	67.5	359	M27x2	68	95	47.5	M33x2	35	37	125	100	15.0	0.0301
	45																			85		0.0346
80	56	56	35	30	50	120	133	35	107	80	416	M27x2	80	104	60	M42x2	40	42	196	134	25.0	0.0540
	60																			125		0.0568
	70																			100		0.0649
	70	70	44	38	60	145	165	40	135	92.5	488	M27x2	96	115	72.5	M52x2	50	55	306	210	42.5	0.0726
125	80																			181		0.0818
	90																			147		0.0923
	70	80	49	42	70	165	180	44	155	102.5	530	M27x2	104	120	82.5	M52x2	55	60	384	288	57.7	0.0875
	80																			259		0.0968
140	100																			188		0.1190
	80	90	55	47	80	190	206	44	175	115	584	M27x2	114	136	95	M60x2	65	70	502	376	83.8	0.1042
	90																			343		0.1147
	110																			265		0.1394
160	90																			477		0.1221
	100	100	60	52	90	210	225	50	200	125	651	M27x2	124	151	105	M72x3	75	80	636	439	114.0	0.1338
	125																			329		0.1665
	100	110	70	57	100	235	255	55	222	137.5	708	M27x2	134	161	117.5	M72x3	85	90	785	589	152.0	0.1555
200	110																			547		0.1665
	140																			400		0.2148
	110	125	70	57	110	273	290	60	248	158.5	783	M33x2	152	169	136.5	M80x3	85	90	950	712	222.2	0.2357
	125																			447		0.2557
220	125	140	85	72	120	298.5	324	65	268	171.3	845	M33x2	167	178	149	M90x3	90	95	1227	920	293.3	0.3190
	140																			842		0.2850
	180																			519		0.3640
	140	155	90	72	140	355.6	390	65	308	199.8	945	M33x2	182	210	177	M100x3	110	115	1539	1154	458.5	0.4172
280	160																			1036		0.4542

Total mass calculation:  $M = m + \Delta m \cdot m^*$  (stroke length in mm)

#### 4. Symbols of the hydraulic cylinders CB type:

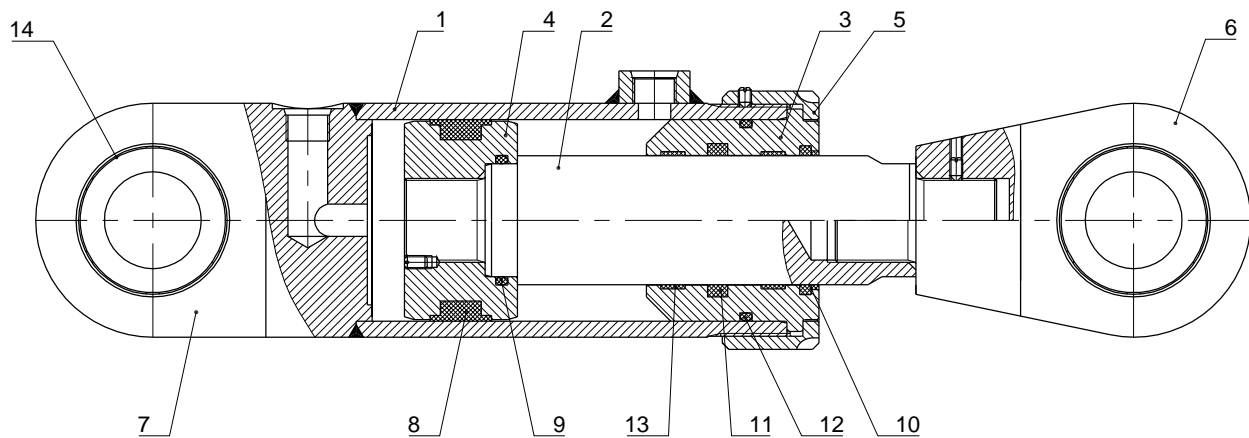


#### 5. Placing an order:

example: Hydraulic cylinder CB - 125 / 80 x 400 - ZPW

Hydraulic cylinder CB type with reversible operation, with piston diameter  $D=125$  [mm], with rod diameter  $d=80$  [mm], with stroke length  $S=400$  [mm], rod with outside thread - Z, axes of connection ports perpendicular to the axis of mounting eye in the cylinder's bottom - P piston-rod eye with inside thread - W, without end position cushioning.

6. Spare parts for hydraulic cylinders CB type.



Pos.	Name	Am.
1.	Cylinder barrel	1
2.	Rod (W or Z type)	1
3.	Stifler	1
4.	Piston	1
5.	Nut	1
6.	Piston-rod eye (W or Z type)	1
7.	Bottom of the cylinder	1
8.	Piston seal	1
9.	Seal ring	1
10.	Wiper ring	1
11.	Seal ring	1
12.	Seal ring	1
13.	Wear ring	2
14.	Bearing	2

Placing an order:

Spare parts for hydraulic cylinders CB - 125 / 80 x 400 - ZPW

Stifler pos. 3

Rod pos. 2

Set of seals pos. 8,9,10,11,12,13.