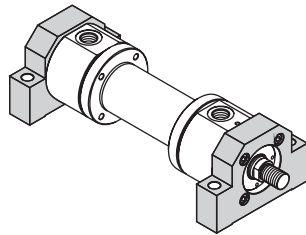


Side foot

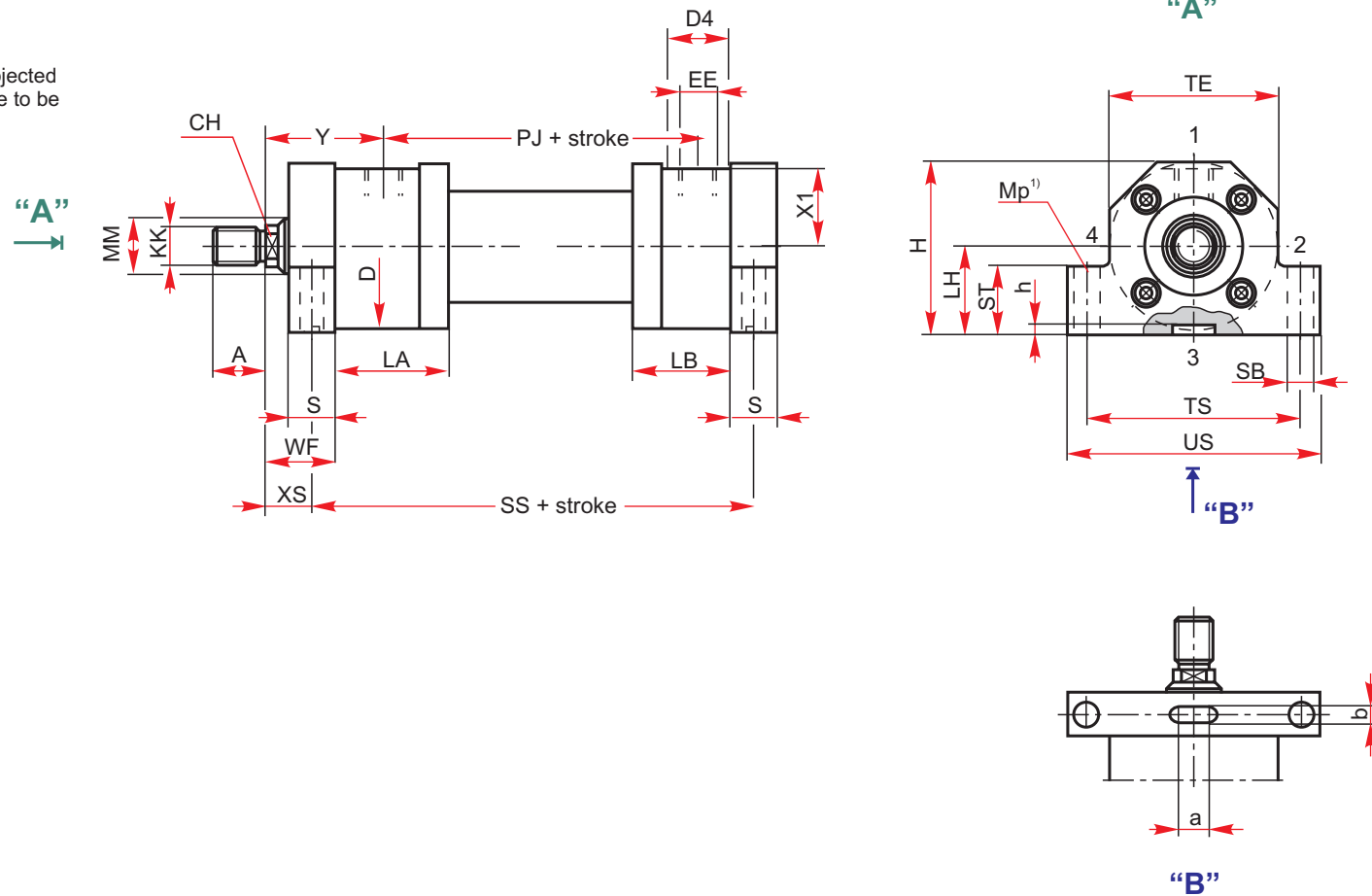
MS2

Type 03



Remarks:

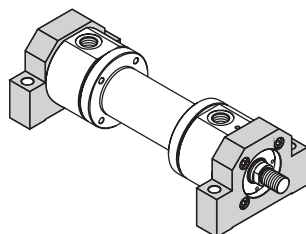
- 1) = The fixing screws must not be subjected to shear loads. The fixing screws are to be tightened to the stated tightening torque "Mp".



## Side foot

MS2

Type 03



## Remarks:

- 1) = Tightening torque
- 2) = Thread version Y (to ISO 6020/1)
- 3) = Thread version W (VW standard VW 39 D 920)

MM - Rod diameter

Bore	MM	ISO 6020/1		VW 39 D920		CH	D	D4	EE	Y	PJ +stroke	VE	WF	XS ±2	SS ±2 +stroke	a	b D10	h	H max.	LH h10	S	SB H13	ST max.	TE	TS js13	US max.	LA ±1	LB ±1	Mp <sup>1)</sup> Nm
		KK <sup>2)</sup>	A <sup>2)</sup>	KK <sup>3)</sup>	A <sup>3)</sup>																								
25	14	M12x1,25	16	-	-	12	56	25	G1/4	58	77	15	28	18	142	12	6	3,5	60	32	20	9	32	56	75	92	59	44	24
	18	M14x1,5	18	M12x1,25	16	14																							
32	18	M14x1,5	18	-	-	14	67	28	G3/8	64	89	19	32	19,5	163	17	8	4	72	38	25	11	38	67	90	110	65	50	45
	22	M16x1,5	22	M14x1,5	18	17																							
40	22	M16x1,5	22	-	-	17	78	34	G1/2	71	97	19	32	19,5	183	17	8	4	82	43	25	11	43	78	100	120	75	58	45
	28	M20x1,5	28	M16x1,5	22	22																							
50	28	M20x1,5	28	-	-	22	95	34	G1/2	72	111	24	38	22	199	20	10	4,5	100	52	32	13,5	52	95	120	145	74	62	80
	36	M27x2	36	M20x1,5	28	28																							
63	36	M27x2	36	-	-	28	116	42	G3/4	82	117	29	45	29	211	20	10	4,5	120	62	32	17,5	62	116	150	180	82	70	195
	45	M33x2	45	M27x2	36	36																							
80	45	M33x2	45	-	-	36	130	42	G3/4	91	134	36	54	34	236	28	14	5	135	70	40	22	70	130	170	210	89	77	385
	56	M42x2	56	M33x2	45	46																							
100	56	M42x2	56	-	-	46	158	47	G1	108	162	37	57	32	293	34	16	6	161	82	50	26	82	158	205	250	114	93	660
	70	M48x2	63	M42x2	56	60																							
125	70	M48x2	63	-	-	60	192	47	G1	121	174	37	60	32	321	37	18	6	196	100	56	33	100	192	245	300	127	96	1300
	90	M64x2	85	M48x2	63	75																							
160	90	M64x2	85	-	-	75	238	58	G1 1/4	143	191	41	66	36	364	78	22	8	238	119	60	33	119	238	295	350	155	114	1300
	110	M80x3	95	M64x3	85	90																							
200	110	M80x3	95	-	-	90	285	58	G1 1/4	190	224	45	75	39	447	122	28	9	288	145	72	39	145	285	350	415	209	130	2280
	140	M 100x3	112	M80x3	95	120																							

\* Unless otherwise specified, all dimensions are given in millimetres.

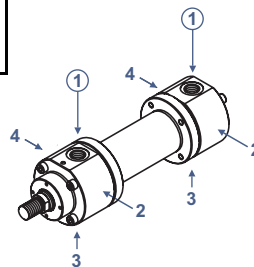
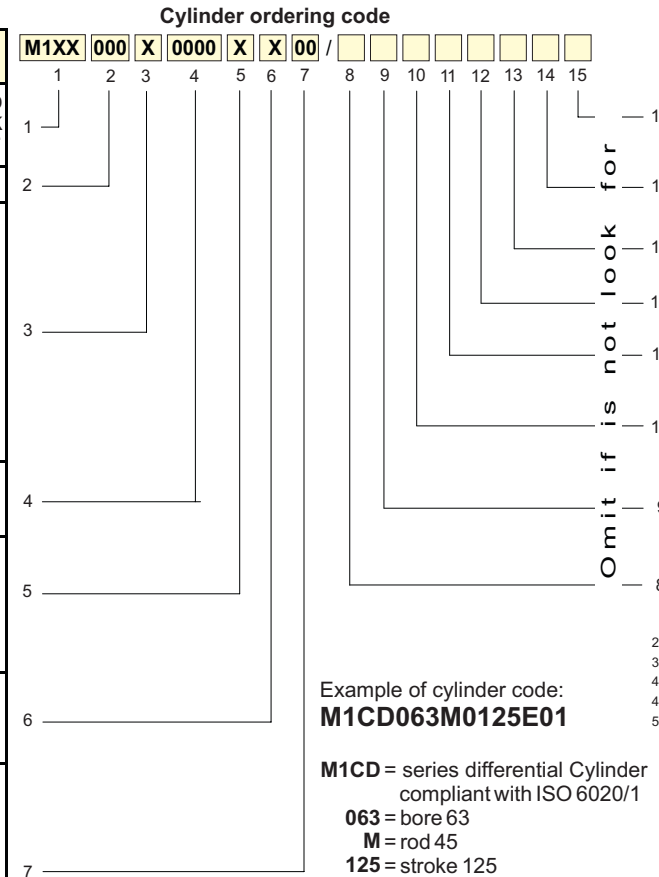


## How to order a HYDROMAT M1 series cylinder compliant with ISO 6020/1

The HYDROMAT M1 series cylinders compliant with ISO 6020/1 standards are provided with an identification code which describes the construction specifications in a non-ambiguous way. To make up the code for the order, follow the code diagram set out below and insert the letters identifying the various features of the desired cylinder in the sequence given below.

Features	Description	Code
<b>Series</b>	M1 Differential cylinder according to ISO 6020/1 M1 Double rod cylinder <sup>1)</sup> M1 Cylinder with linear transducer <sup>1)</sup>	<b>M1CD</b> <b>M1DK</b> <b>M1CT</b>
<b>Bore</b>	Specify bore in mm (indicate 3 figures)	-
<b>Rod MM (diameter)</b>	14 mm (bore 25) 18 mm (bore 25 and 32) 22 mm (bore 32 and 40) 28 mm (bore 40 and 50) 36 mm (bore 50 and 63) 45 mm (bore 63 and 80) 56 mm (bore 80 and 100) 70 mm (bore 100 and 125) 90 mm (bore 125 and 160) 110 mm (bore 160 and 200) 140 mm (bore 200)	<b>B</b> <b>D</b> <b>F</b> <b>H</b> <b>L</b> <b>M</b> <b>P</b> <b>R</b> <b>T</b> <b>V</b> <b>Z</b>
<b>Stroke</b>	Specify the stroke in mm (indicate 4 figures)	-
<b>Cushioning</b>	Without cushioning Front cushioning Rear cushioning <sup>1)</sup> Cushioning on both ends <sup>1)</sup> Double rod without cushioning Double rod with cushioning	<b>C</b> <b>E</b> <b>G</b> <b>P</b> <b>S</b> <b>T</b>
<b>Rod end</b>	Thread (ISO 6020/1) Thread (VW standard VW 39 D 920)	<b>Y</b> <b>W</b>
<b>Mounting type</b>	Basic version (not in line to ISO 6020/1) Rectangular front flange -MF1 (not in line to ISO) Rectangular rear flange -MF2 (not in line to ISO) Side foot - MS2 Intermediate fixed trunnion - MT4 Rear clevis - MP3 Rear spherical bearing - MP5 Round front flange - MF3 Round rear flange - MF4	<b>00</b> <b>01</b> <b>02</b> <b>03</b> <b>06</b> <b>07</b> <b>08</b> <b>13</b> <b>14</b>

<sup>1)</sup> Not available for bores 25, 32, 40 (rods 14, 18 i 22), see page 43



- When issuing the order for the cylinder, provide the following information:
- code identifying the model
  - quantity
  - special features (if requested) with any enclosed sketches and/or construction drawings
  - operating conditions for special uses
  - delivery date with type of priority

Code	Description	Features
K00	Specify the position of the front and rear inductive sensors	<b>Position of inductive sensors</b>
S00	Specify the position of the front and rear air bleeds	<b>Position of air bleeds</b>
R00	Specify the position of the front and rear braking adjustment devices	<b>Position of braking adjustment devices</b>
P00	Specify the position of front and rear connections	<b>Position of connections</b>
-	Specify the number of spacers (multiples of 50 mm)	<b>Spacers</b>
T U <sup>2)</sup> V <sup>3)</sup> Z	Seals for water and glycol mixtures Low friction seals Seals for high temperatures and/or aggressive fluids Seals for heavy application - Chevron seals	<b>Seals</b>
D <sup>4)</sup> E <sup>4)</sup> F <sup>4)</sup>	Front inductive sensor Rear inductive sensor Front and rear inductive sensor	<b>Inductive sensors</b>
A B C <sup>5)</sup>	Front air bleed Rear air bleed Front and rear air bleeds	<b>Air bleed</b>

- 2) Minimum working pressure: 20 bar
- 3) Max. working temp. for M1CT and M1CD series cyl. fitted with inductive sensors: 70 °C
- 4) Using inductive sensors, the cylinder must be provided with cushioning (front or rear)
- 4) Not available for bores 25 and 32, see page 42
- 5) Compulsory for M1CT series cylinders

Example of cylinder code:  
**M1CD063M0125E01**

**M1CD** = series differential Cylinder compliant with ISO 6020/1  
**063** = bore 63  
**M** = rod 45  
**125** = stroke 125  
**E** = front cushioning  
**01** = rectangular rear flange MF1 (not compliant with ISO standards).

The positions of the inlet connections and front cushion are standard so they are not specified in the order code (oil feeding inlets side 1 on head and cap - cushion side 3 on head and cap - specified in Table 19 on page 62).

Example of cylinder code:  
**M1CD125T0800PW03/FUP14K22**

**M1CD** = series differential Cylinder compliant with ISO 6020/1 standards  
**125** = bore 125, **T** = rod 90, **0800** = stroke 800,  
**P** = cushioning on both ends,  
**W** = thread rod ends (VW standard VW 39 D 920)  
**03** = side foot (ISO MS2)  
**F** = front and rear inductive sensor, **U** = low friction seals  
**P** = position of incoming connections side 1 on the head and side 4 on the cap  
**K** = position of inductive sensor side 2 on head and 2 on cap

- standard cushion position side 3 on head and cap (see Table 19 on page 62).