

JIS

JAPANESE INDUSTRIAL STANDARD

**Automotive diesel engines—
Fuel injection pumps—
Shapes and dimensions**

JIS D 3603—1993

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In the event of any doubt arising,
the original Standard in Japanese is to be final authority.

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Automotive diesel engines - Fuel
injection pumps - Shapes and dimensions

D 3603-1993

1. Scope This Japanese Industrial Standard specifies the shapes and dimensions necessary for the interchangeability in mounting the fuel injection pumps (hereafter referred to as "pump") used for automotive diesel engines on the engine, and in mounting the accessories on the pump.

Remarks 1. The shapes and dimensions of driving shaft coupling is specified in Annex 1.

2. The following standards are cited in this Standard:

JIS B 0209 Limits of sizes and tolerances for metric coarse screw threads

JIS B 0211 Limits of sizes and tolerances for metric fine screw threads

3. The international standards corresponding to this Standard are shown below:

ISO 6519 Tapers for shaft ends and hubs for fuel injection pumps

ISO 7299 Road vehicles - End-mounting flanges for fuel injection pumps

ISO 7612 Base mounted in-line fuel injection pumps

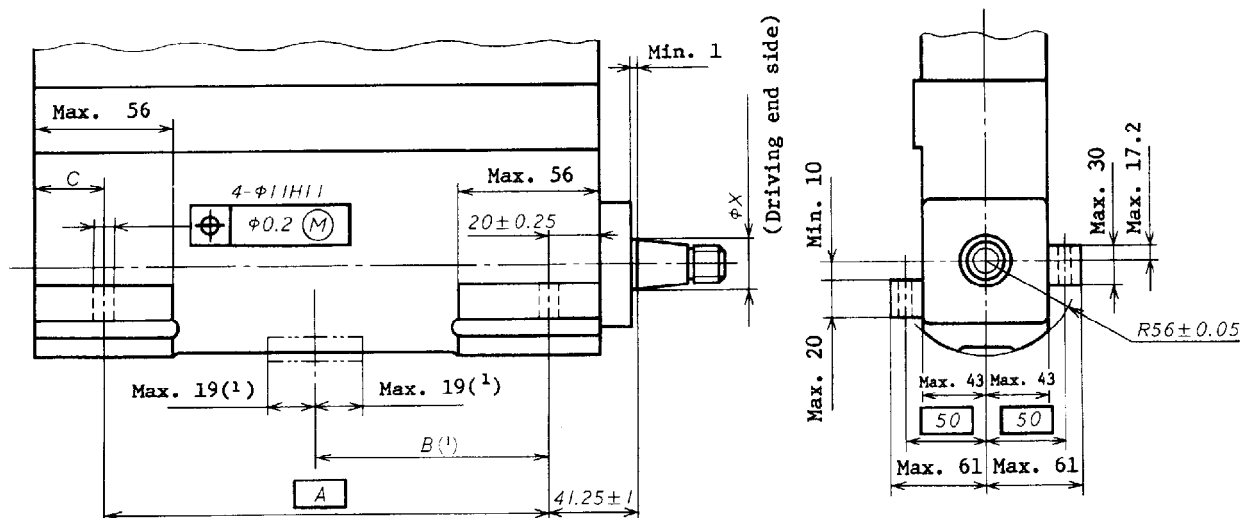
ISO 7879 Road vehicles - Cradle-mounted in-line fuel injection pumps - Mounting dimensions

2. Shape and dimension of mounting part of pump body

2.1 Cylindrical surface mounting type (for in-line type pump) The shape of fitting part of the pump of cylindrical surface mounting type shall be classified into Type 1, Type 2 and Type 3, and the shapes and dimensions shall be in accordance with Fig. 1, Fig. 2 and Fig. 3 respectively.

Fig. 1. Cylindrical surface mounting type, Type 1

Unit: mm

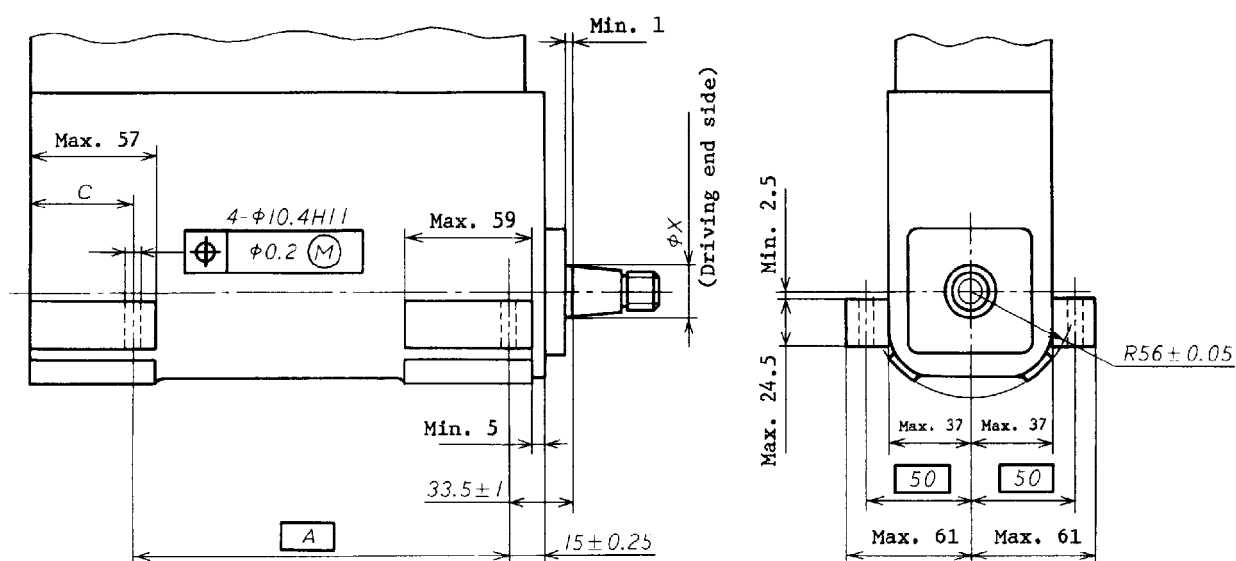


Number of cylinders	X Nominal	A	B ⁽¹⁾	C ±0.25
4	25 or 30	132	-	32
6		202	-	34.5
8		272	142.5	37

Note ⁽¹⁾ The chain double-dashed lines indicate the cylindrical surface mount at central part in the case of eight cylinders.

Fig. 2. Cylindrical surface mounting type, Type 2

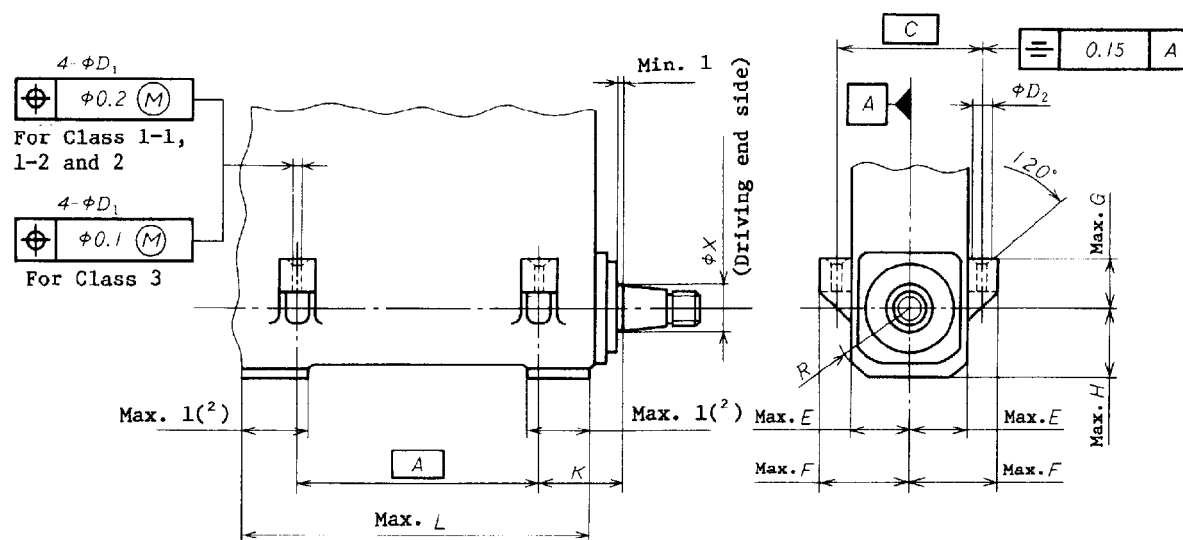
Unit: mm



Number of cylinders	X Nominal	A	C ±0.25
4	25 or 30	132	37
6		202	31
8		272	45

Fig. 3. Cylindrical surface mounting type, Type 3

Unit: mm



Class	Number of cylinders	A	X Nominal	C	D ₁ H13	D ₂ +0.5 0	E Max.	F Max.	G Max.	H Max.	I Max.	K ±1	L Max.	R ±0.05
1-1	3	88	17 or 20	84	8.5	15.5	32.5	55	28	39	55 ⁽³⁾	24.5	120	45
	4	120											152	
	6	184											216	
	8	248											280	
1-2	4	120	25	84	8.5	15.5	33.5	55	28	41	55 ⁽³⁾	31.5	158	45
	6	184											222	
	8	248											286	
2	4	108	20 or 25	84	8.5	18	35	55	7	44	36	19.5	130	50
	6	164											188	
	8	218											240	
3	4	132	25 or 30	100	10.5	19.5	53	64	18	53	49	33.5	172	56
	6	202											242	
	8	272											312	
	10	345											385	
	12	415											455	

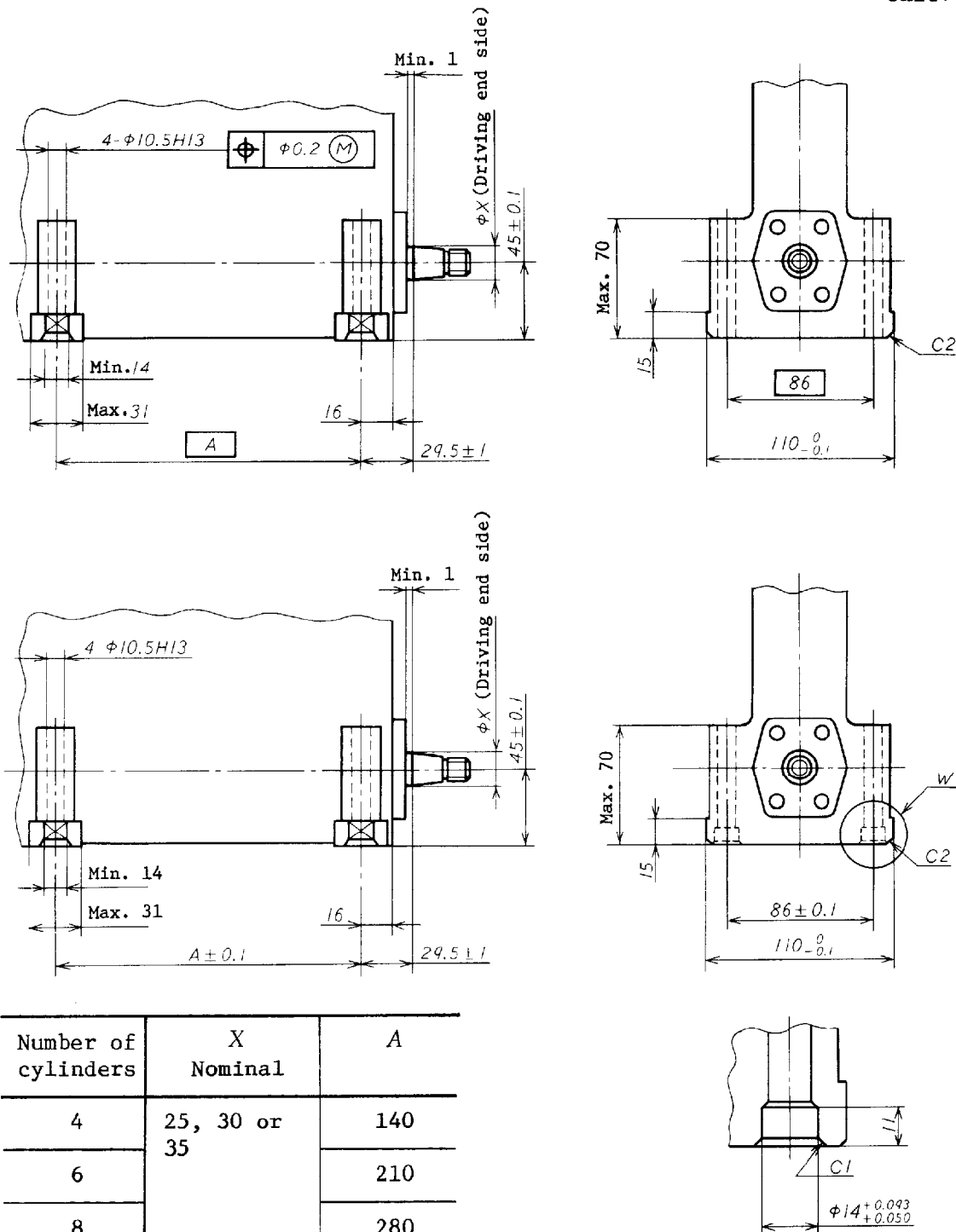
Notes (2) Indication of touching surface length.

(3) For Class 1-1 and 1-2, the touching surface length is allowed to cover the total length L.

2.2 Flat surface mounting type (for in-line type pump) The shapes of the mounting part of flat surface mounting type pump shall be classified into Type 1, Type 2 and Type 3, and the shapes and dimensions shall be in accordance with Fig. 4, Fig. 5 and Fig. 6 respectively.

Fig. 4. Flat surface mounting type, Type 1

Unit: mm

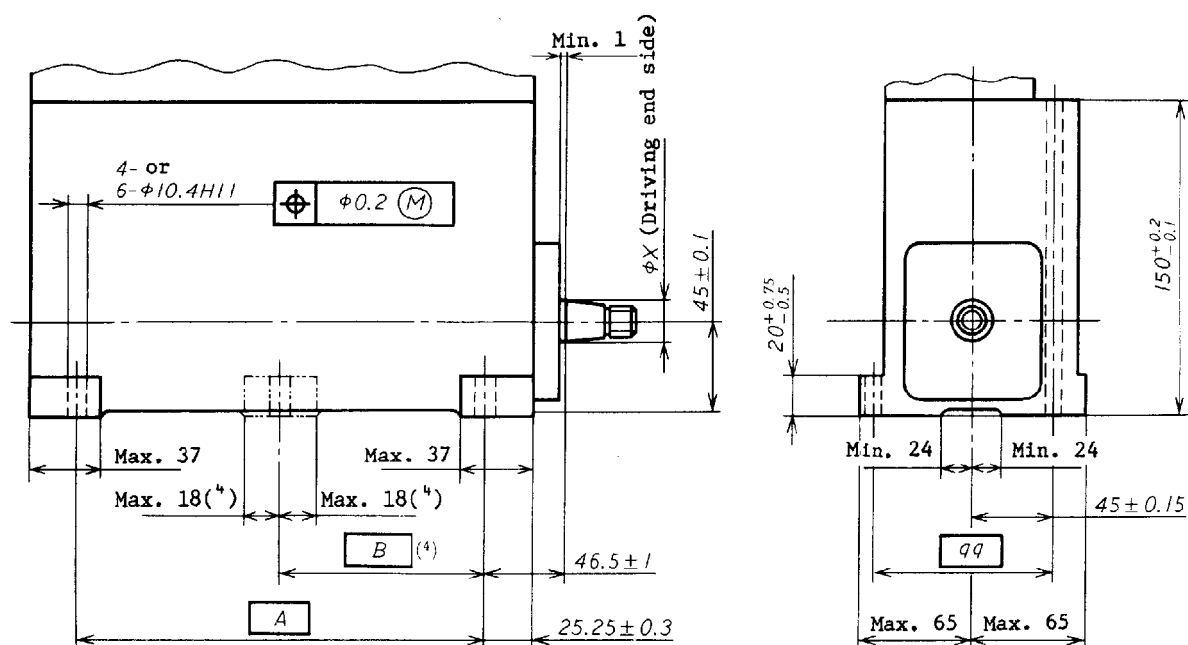


Number of cylinders	X Nominal	A
4	25, 30 or 35	140
6		210
8		280
10		353
12		423

Enlarged figure of W part

Fig. 5. Flat surface mounting type, Type 2

Unit: mm

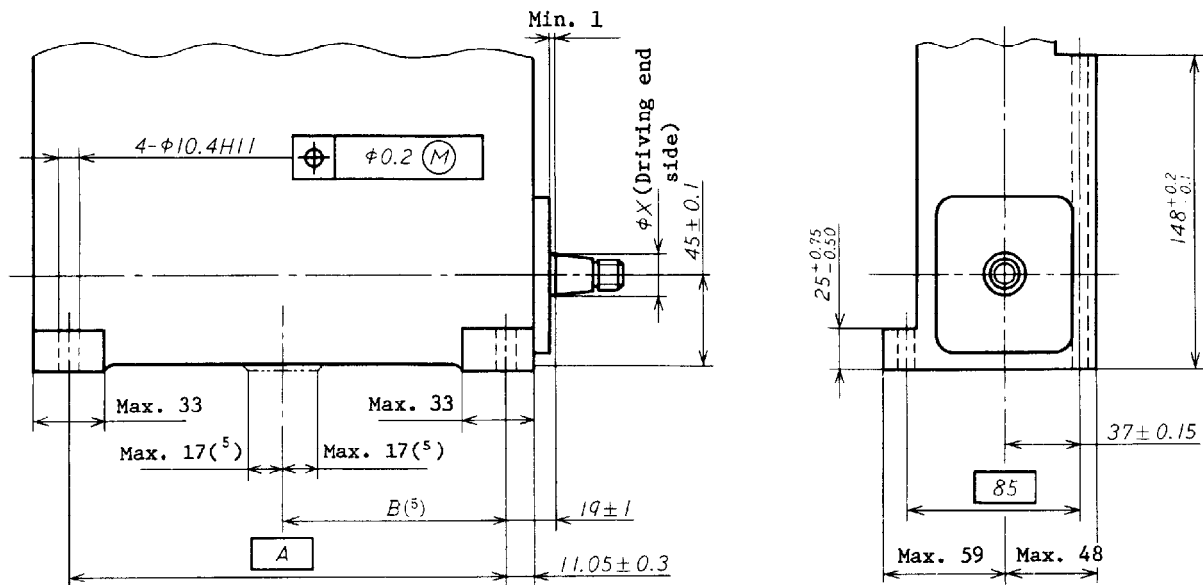


Number of cylinders	X Nominal	A	B (°)	Number of mounting holes
4	25 or 30	133.5	-	4
6		206	-	4
8		278.5	139.25	6

Note (°) The chain double-dashed lines indicate the flat surface mount at central part in the case of eight cylinders.

Fig. 6. Flat surface mounting type, Type 3

Unit: mm



Number of cylinders	X Nominal	A	$B^{(5)}$ ± 0.25
4	25 or 30	154	-
6		218	-
8		302	151

Note (5) The chain double-dashed lines indicate the flat surface mount at central part in the case of eight cylinders.