



Bell Housings with Rigid / Flexible Pump Mounting

PTS / PT

1. DESCRIPTION

1.1. GENERAL

Bell housings are connection elements between drive motors and hydraulic pumps. Both connecting flanges are supplied ready for installation. The bell housings are made from an aluminium cast alloy.

1.2. MODELS

Bell housings in both flexible and rigid design are available in dimensions to the VDMA 24561 standard.

2. TECHNICAL SPECIFICATIONS

2.1. GENERAL

2.1.1 Mounting position

Optional.

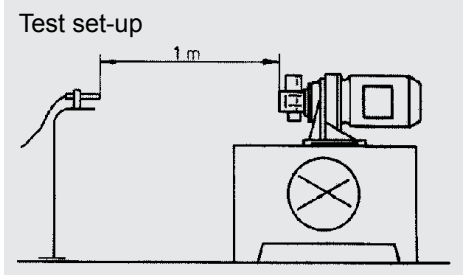
2.1.2 Operating temperature

-20 °C to +100 °C

2.1.3 Noise level reduction

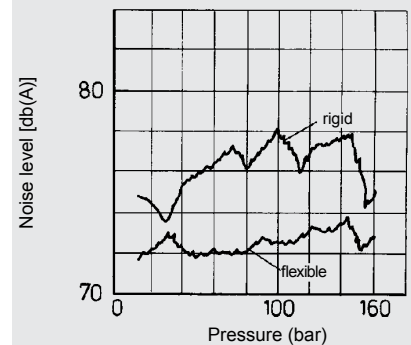
The noise level reduction achieved depends on many factors such as pump type, operating pressure, type of fitting, design etc. It is therefore not possible to quote exact figures. In general, noise level reductions of up to 6 db(A) can be achieved.

The illustration in the next column shows how the test is set up, together with a graph showing typical noise level improvements when using a flexible bell housing compared to a rigid bell housing.



Bell housing with foot bracket mounted on the oil tank cover plate.

Noise level diagram



2.1.4 Notes on mounting

The fixing bolts used for mounting the motor to the pump must be long enough in order to fully utilize the available thread depth on the bell housing. If the bolts used are too short, there is the risk of damaging the thread.

2.1.5 Weight loading

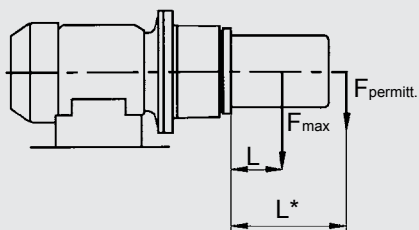
The permitted radial or axial load of the bell housing with flexible and rigid pump mounting, allowing for an operating temperature of +60 °C:

Bell housings Nominal size	Type of Damping ring	Permitted force due to gravity F_{max} [N]	Centre of gravity distance for radial load L [mm]
160	Only rigid bell housing possible		
200	E	400	200
	K	500	
250	E	600	200
	K	800	
300	E	1000	200
	K	1300	
350	E	1500	200
	K	2000	
400	E	2200	200
	K	3000	
450	E	4000	200
	K	5500	
550	E	4000	200
	K	5500	
660	E	4500	200
	K	6000	
800	Only rigid bell housing possible		

For a larger centre of gravity distance L^* the permitted force due to gravity is reduced according to the following formula:

$$F_{\text{permitt.}^*} = \frac{F_{\text{max.}} \cdot L}{L^*} \text{ [N]}$$

If the centre of gravity distance L^* of the pump is smaller than the centre of gravity distance L in the table, then the permitted force due to gravity $F_{\text{permitt.}}$ for the pump is equal to the maximum force due to gravity F_{max} in the table.



2.2. SPECIFICATIONS

2.2.1 Permitted fluids

Mineral oil to DIN 51524,
other fluids on request.

NOTE

The information in this brochure relates to the operating conditions and applications described.

For applications and operating conditions not described, please contact the relevant technical department.

Subject to technical modifications.

3. MODEL CODE

PT - 250 / 5.0 / M / FL001 - E / F3

Type _____

PTS = Rigid bell housing
PT = Flexible bell housing

Nominal size for IEC standard motor (type of mounting B5, B35, V1, V15) _____

Nominal size PTS / PT	Type		Electric motor size	Output n = 1430 rpm
	Rigid	Flexible		
160	x		71	0.25 - 0.37 kW
200	x	x	80/90	0.55 - 1.5 kW
250	x	x	100/112	2.2 - 4.0 kW
300	x	x	132	5.5 - 7.5 kW
350	x	x	160/180	11 - 22 kW
400	x	x	200	30 kW
450	x	x	225	37 - 45 kW
550	x	x	250/280	55 - 90 kW
660	x	x	315	110 - 200 kW
800	x		335/400	250 - 400 kW

Model with additional bores _____

Rigid PTS	Flexible PT	Additional bores
2.0	5.0	Without additional bore (standard)
5.1	5.1	1x Leakage bore
5.3	5.3	Additional bores to Cnomo standard*

Mineral oil resistance (Special models on request) _____

Bore template code for pump connection (see our sizing program PT-WIN) _____

Type of damping ring (only required for flexible bell housings) _____

E = standard
K = damping ring for higher loads (greater rigidity)

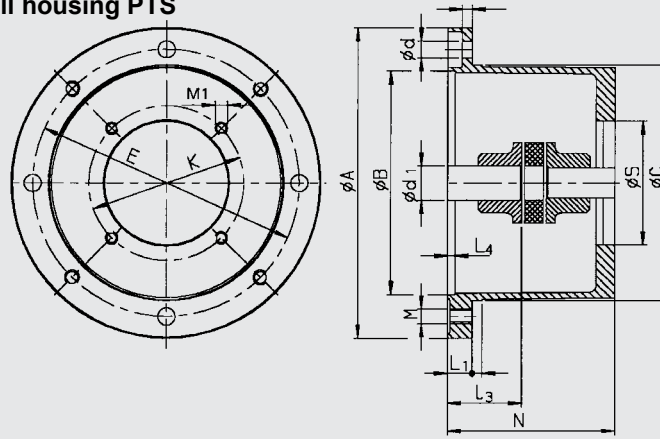
Accessories _____

... = without accessories (no details)
F3 = bell housing foot bracket

* Cnomo: 1x mounting hole with grille, 1x leakage bore

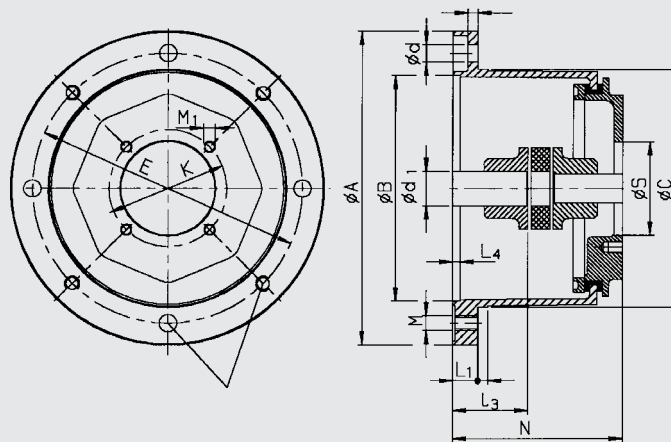
3.1. DIMENSIONS

3.1.1 Dimensions of rigid bell housing PTS



Electric motor size	KW at n=1500 1/min	Drive shaft Ød ₁ x l _s	Bell housing	Ø A	Ø B	Ø C	E	M	Ø d	L1	L4
71	0.25 - 0.37	14x30	PTS-160	160	110	110	130	M8	9	13	4
80	0.55 - 0.75	19x40									
90S-90L	1.1 - 1.5	24x50	PTS-200	200	130	145	165	M10	11	16	6
100L-112M	2.2 - 4	28x60	PTS-250	250	180	190	215	M12	14	19	6
132S-132M	5.5 - 7.5	38x80	PTS-300	300	230	234	265	M12	14	20	6
160M-160L	11 - 15	42x110									
180M-180L	18.5 - 22	48x110	PTS-350	350	250	260	300	M16	18	25	6
200 L	30	55x110	PTS-400	400	300	300	350	M16	18	25	6
225S-225M	37 - 45	60x140	PTS-450	450	350	350	400	M16	18	25	6
250M	55	65x140									
280S-280M	75 - 90	75x140	PTS-550	550	450	450	500	M16	18	26	6
315S-315L	110 - 200	80x170	PTS-660	660	550	550	600	M20	22	32	6
355L-400L	250 - 400	95x170	PTS-800	800	680	680	740	M20	23	60	10

3.1.2 Dimensions of flexible bell housing PT



Electric motor size	KW at n=1500 1/min	Drive shaft Ød ₁ x l _s	Bell housing	Ø A	Ø B	Ø C	E	M	Ø d	L1	L4
80	0.55 - 0.75	19x40	PT-200	200	130	145	165	M10	11	16	6
90S-90L	1.1 - 1.5	24x50									
100L-112M	2.2 - 4	28x60	PT-250	250	180	190	215	M12	14	20	6
132S-132M	5.5 - 7.5	38x80	PT-300	300	230	234	265	M12	14	20	6
160M-160L	11 - 15	42x110									
180M-180L	18.5 - 22	48x110	PT-350	350	250	260	300	M16	18	25	6
200 L	30	55x110	PT-400	400	300	300	350	M16	18	25	6
225S-225M	37 - 45	60x140	PT-450	450	350	350	400	M16	18	25	6
250M	55	65x140									
280S-280M	75 - 90	75x140	PT-550	550	450	450	500	M16	18	40	6
315S-315L	110 - 200	80x170	PT-660	660	550	550	600	M20	22	32	6

To identify the bore template code (dimensions N, S, K, M1), please use our sizing program PT-WIN as far as possible, or consult Head Office. You can download and use the PT-WIN program free of charge from our website www.hydac.com by clicking through Support » Download » Software » Product Division - Accessories.

Accessories:

For the range of accessories (bell housing foot brackets, bell housing mounting plate, damping rails, damping rings and couplings) please use our supplementary brochure "Bell Housing Accessories". This brochure can be downloaded from our website www.hydac.com.

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