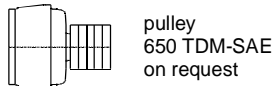


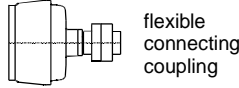
output configurations:



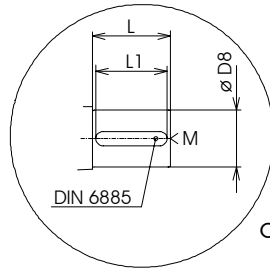
pulley
650 TDM-SAE
on request



cardan shaft

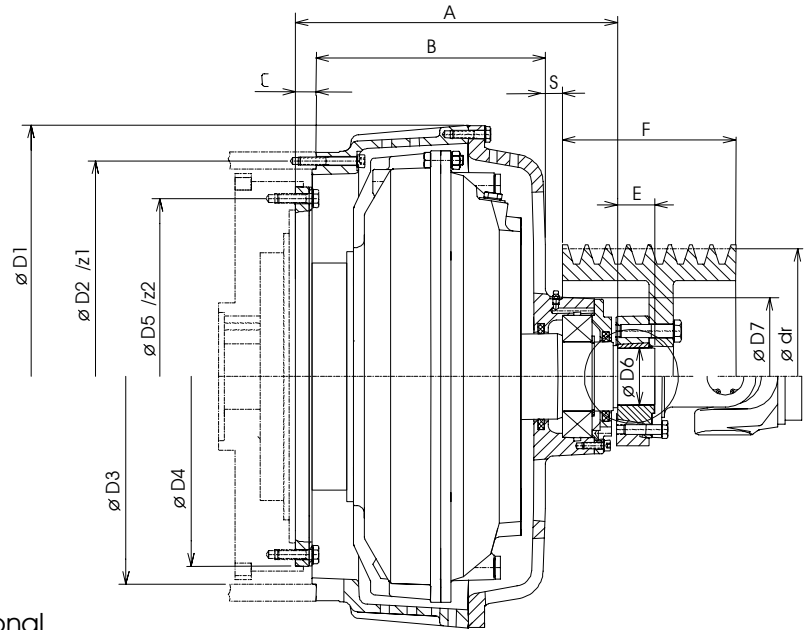


flexible
connecting
coupling



DIN 6885

optional



VTC		Flywheel	Housing	Flywheel an Flywheel housing						
Size/Type	SAE-connection	SAE-J620d	SAE-J617c	ØD1	ØD2	z1	ØD3 h7	ØD4 f8	ØD5	z2
422 TDM	SAE-11.5/2	11.5	2	539	466.72	12	447.68	352.42	333.38	8
422 TDM	SAE-11.5/3	11.5	3	539	428.62	12	409.58	352.42	333.38	8
487 TDM	SAE-14/1	14	1	618	530.22	12	511.18	466.72	438.15	8
562 TDM	SAE-14/1	14	1	706	530.22	12	511.18	466.72	438.15	8
650 TDM	SAE-18/0	18	0	830	679.45	16	647.70	571.50	542.92	6

VTC		A	B	C	ØD7	V-belt pulley		
Size/Type	SAE-connection					F max	Ød _r min	S min
422 TDM	SAE-11.5/2	367.05	239.7	39.6	180	212.5	280	21.0
422 TDM	SAE-11.5/3	367.05	239.7	39.6	180	212.5	280	21.0
487 TDM	SAE-14/1	396.7	281.7	25.4	205	212.5	315	21.3
562 TDM	SAE-14/1	451.8	314.1	25.4	235	314.5	315	21.9
650 TDM	SAE-18/0	569.7	429.7	15.7	275	on request		

VTC		shaft end locking device		shaft end key connection			
Size/Type	SAE-connection	ØD6 h9	E	ØD8 h9	L	L1	M
422 TDM	SAE-11.5/2	70	45	70	110	100	M20-42
422 TDM	SAE-11.5/3	70	45	70	110	100	M20-42
487 TDM	SAE-14/1	80	49	80	120	110	M20-42
562 TDM	SAE-14/1	95	59	95	150	140	M24-50
650 TDM	SAE-18/0	on request		110	160	150	M24-50

Subject to dimensional and design modifications, dimensions in mm

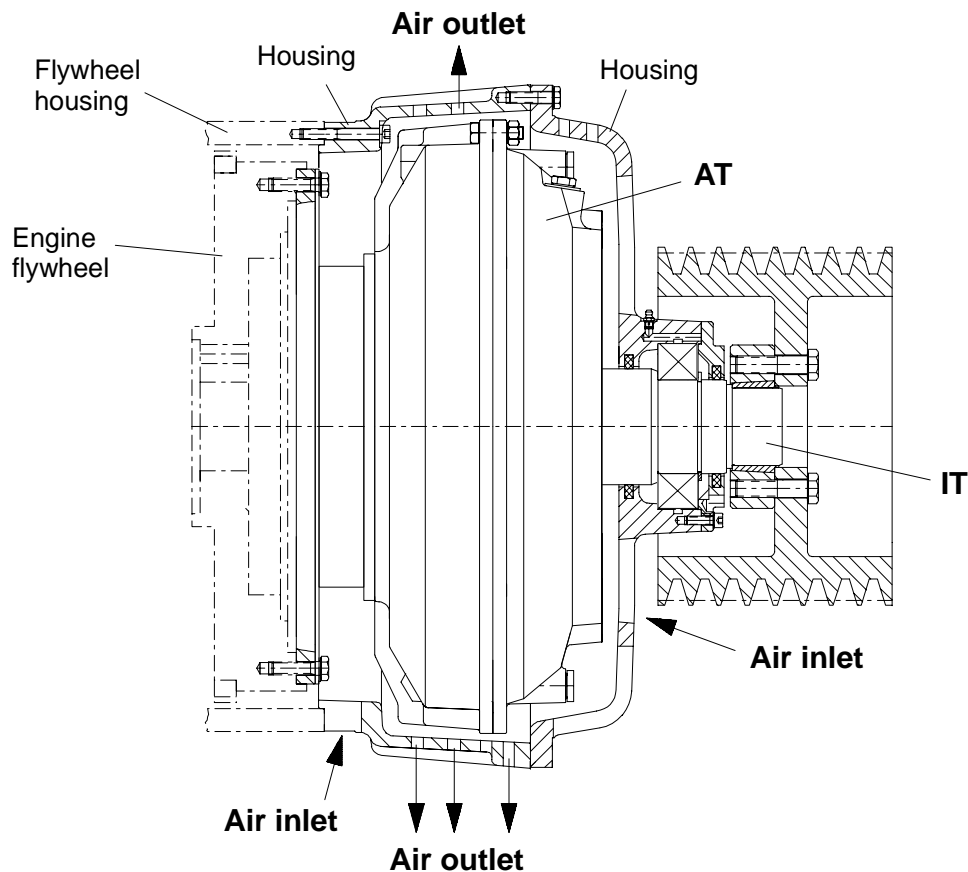
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VTC		max. Oil filling Liter	Total weight with max. oil filling and housing kg 1)	Inertia moment at max. oil filling		Standard-Assembly plan Drg. No.
Size/Type	SAE-connection			IT (Inner parts) kgm ² 1)	AT (Outer parts) kgm ²	
422 TDM	SAE-11.5/2	10	150	0.289	0.960	3600-036349
422 TDM	SAE-11.5/3	10	150	0.289	0.960	3600-036349
487 TDM	SAE-14/1	14.7	210	0.590	2.315	3600-036465
562 TDM	SAE-14/1	22	310	1.285	4.395	3600-036452
650 TDM	SAE-18/0	36	480	2.500	6.550	---

1) Values without V-belt pulley

Note: The air inlet ports and the air outlet ports are uniformly distributed over the entire housing circumference. The air flow through these ports must not be obstructed. The reaction forces resulting from the belt pull and coupling weight at the engine flywheel and flywheel housing must be checked by the purchaser.

Shaft end standard: for locking device connection

Shaft end optional: for key connection

Bearing design:

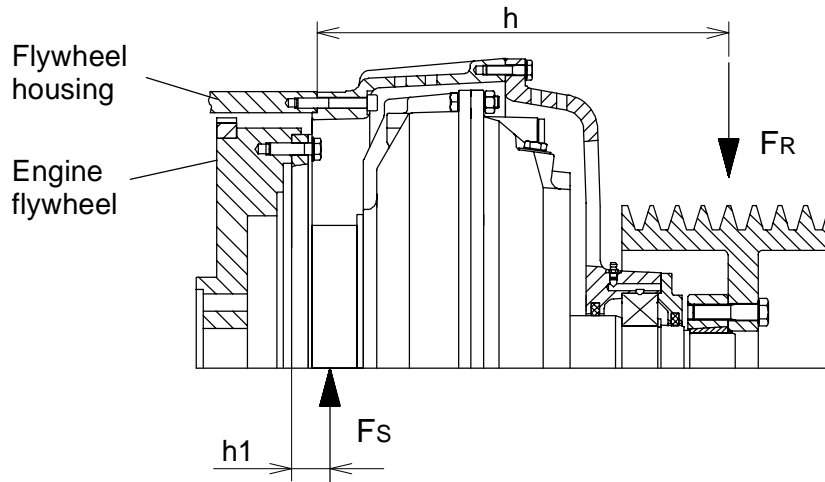
standard: for output through V-belt pulley

optional: for output through cardan shaft

for output through flexible connecting coupling

Reaction forces F_s at the flywheel

Sketch:



Calculation:

$$F_s = \frac{F_R \cdot (h - a)}{b}$$

with:

F_s Reaction force at flywheel in [N]

F_R Shaft load in [N] resulting from the belt drive

h Distance of load application point F_R from the contact surface of housing
in [mm] according to the above sketch.

h_1 Distance of load application point F_s from the contact surface of engine flywheel
in [mm] according to the following table.

a, b Calculation factors as a function of the coupling size according to the
following table:

Coupling type and -size	422 TDM-SAE	487 TDM-SAE	562 TDM-SAE	650 TDM-SAE
a	280	326	366	on request
b	297	329	368	
h_1	23	24	24	