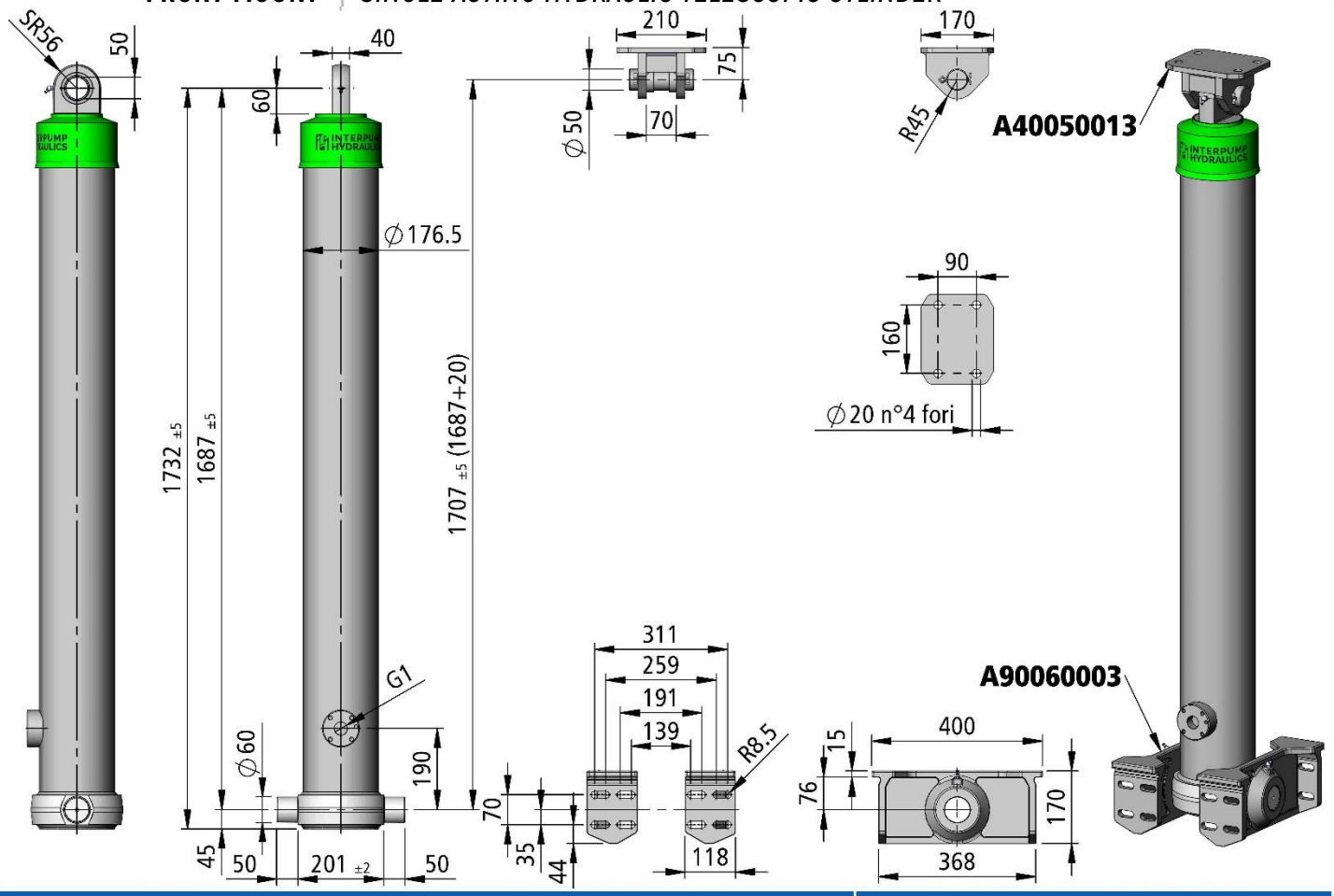
HPF serie

SPECIFICATION SHEET

FRONT MOUNT | *SINGLE ACTING HYDRAULIC TELESCOPIC CYLINDER*



Front end cylinder, pins - eye (spherical bearing)											4F16001544001 – HPF 5390 154 4	
Extension	1	2	3	4	5	6	7	8	9	10	**Tipping weight 37-74 ton (*)**	
Rod diameter [mm]	154	135	116	98							No. 4 telescopic extension	
Stroke length [mm]	1345	1345	1346	1354							Total stroke length: 5390 mm	
Oil [dm³]	25.0	19.3	14.2	10.2							Working volume **68.7** dm³	Residual volume **5.9** dm³
Thrust [kN] at p max	466	358	264	189							Avg. working load 181 kN	Max cylinder load 302 kN
											Critical buckling load fully extended 233 kN (309 bar)	

Technical notes

Mounting dimensions 1687 mm + 20 (-5;+30) mm minimum pull out	Maximum pressure 250 bar	Weight 215 kg
Seal ring: Temperature range (-40; +100) °C - Maximum linear speed 0.5 m/s	Max pump flow 220 dm³/min	Tipping time at flow max 19 s

Enamel RAL9005 two-component solvent semi-gloss finish minimum thickness 60 µm 180 h spray salt test ISO 9227 rating 9 ISO 10289

Chrome coating type CRN minimum thickness 15 µm on rod stage 098 - 40 h spray salt test ISO 9227 rating 9 ISO 10289

The cylinder has been designed to provide only a linear pushing force. The cylinder is not a structural member and must not be used as a stabilizer or be subject to side or pulling load. The cylinder will not prevent the dump body or trailer from rollover or lateral tilt. Cylinder rated pressure reflect only the capability of the pressure-containing envelope and not the force transmitting capability of mounting configurations. The ordinary use of telescopic cylinder will not require any coating since the telescopic stages are exposed to atmospheric agents only during the tip-up operation, if duration is below 2 hours.
(*) Tipping weight calculation
The body weight plus the max payload are the max tipping weight that can be raised by the cylinder. This value, calculated at the max pressure, is a rough indication of the tipping power of the cylinder and must be used as a first criteria for the selection of the cylinder. The real tipping mass can only be calculated by the design engineer of the completed machinery, and must take into account the geometry of the dump body, the operating conditions and all the reasonably foreseeable uses.

Related documentation -

Read and understand Mounting instructions, User manual, Oil specifications, User responsibility before use