

DIN EN 13204:2012-09 (E)

Double acting hydraulic rescue tools for fire and rescue service use - Safety and performance requirements (includes Amendment A1:2012)

Contents		Page
Foreword		4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	7
4	Hazards	10
5	Requirements	11
5.1	Safety requirements	11
5.1.1	General	11
5.1.2	Spreaders	13
5.1.3	Cutters	15
5.1.4	Combi tools	15
5.1.5	Rams	16
5.1.6	Power packs	17
5.1.7	Manual pumps	18
5.1.8	Hose and hose assemblies	18
5.1.9	Hose reels	19
5.1.10	Accessories	19
5.1.11	Noise	19
5.2	Performance requirements	20
5.2.1	General	20
5.2.2	Spreaders	20
5.2.3	Cutters	21
5.2.4	Combi tools	23
5.2.5	Rams	24
5.2.6	Power pack	25
5.2.7	Manual pumps	26
5.2.8	Hoses assemblies and hose reels	26
5.2.9	Accessories	26
6	Verification	26
6.1	General	26
6.2	Verification of safety requirements	27
6.2.1	General. Verify from manufacturers data	27
6.2.2	Spreaders	29
6.2.3	Cutters	30
6.2.4	Combi tools	30
6.2.5	Rams	31
6.2.6	Power packs	31
6.2.7	Manual pumps	32
6.2.8	Hoses and hose assemblies	32
6.2.9	Hose reels	32
6.2.10	Accessories	32
6.2.11	Noise	32
6.3	Verification of performance requirements	33

6.3.1	General	33
6.3.2	Spreaders	33
6.3.3	Cutters	33
6.3.4	Combi tool	34
6.3.5	Rams	34
6.3.6	Power pack	34
6.3.7	Manual pump	35
6.3.8	Hose assemblies and hose reels	36
6.3.9	Accessories	36
7	Information for use	36
7.1	General	36
7.2	Training	36
7.3	Safe and efficient operation	36
7.4	Stowage and cleaning	37
7.5	Inspection and testing	37
8	Marking	37
Annex A (normative) List of hazards		39
Annex B (normative) Noise test code (Grade 2 of accuracy)		42
Annex C (informative) Additional recommendations		45
Annex D (informative) Examples of technical measures for noise reduction		46
Annex ZA (informative) A₁) Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC A₁		47
Bibliography		48