

DIN EN ISO 5459:2025-12 (E)

Geometrical product specifications (GPS) - Geometrical tolerancing - Datums and datum systems (ISO 5459:2024)

Contents		Page
Foreword		v
Introduction		vii
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Symbols	5
5	Role of datums	7
6	General concepts	9
6.1	General	9
6.2	Intrinsic characteristics of surfaces associated with datum features	10
6.2.1	General	10
6.2.2	Single datum established from a single feature	11
6.2.3	Common datum established from two or more single features simultaneously	11
6.2.4	Datum systems established in a defined sequence from two or more single features	13
6.3	Single datums, common datums and datum systems	13
6.3.1	General	13
6.3.2	Single datums	13
6.3.3	Common datums	14
6.3.4	Datum systems	15
7	Graphical language	18
7.1	General	18
7.2	Indication of datum features	18
7.2.1	Datum feature indicator	18
7.2.2	Datum feature identifier	19
7.2.3	Datum targets	19
7.3	Specification of datums and datum systems	23
7.4	Indication and meaning of rules	24
7.4.1	General	24
7.4.2	Rules	24
8	Specification operators for datum	47
8.1	ISO default specification operator for datum	47
8.2	Special specification operator for datum	47
8.2.1	General	47
8.2.2	Filtration specification elements for datum	48
8.2.3	Association specification elements for datum	49
8.3	Drawing-default specification operator for datums	50
Annex A (normative)	Association for datums	51
Annex B (informative)	Invariance classes	61
Annex C (informative)	Examples	63
Annex D (informative)	Former practices	86
Annex E (informative)	Examples of a datum system or a common datum established with contacting features	90

Annex F (normative) Relations and dimensions of graphical symbols	96
Annex G (normative) Establishment of a datum coordinate system from a datum system	99
Annex H (informative) Filter symbols and attached nesting index	103
Annex I (informative) Issue of orientation and location constraints in datum systems	104
Annex J (normative) Filtration of a datum feature which is nominally a plane	111
Annex K (informative) Relation to the GPS matrix model	114
Bibliography	115