

# MEDWAY®

## SPHERICAL BEARINGS



**MEDWAY (UK) LIMITED**

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## SP - SERIES | SPM - SPI

## PAGE 1

### Description

SP-Series is our 3-piece standard range of self lubricating general purpose spherical bearings suitable for light to medium industrial/mechanical load applications requiring low friction, with good wear resistance and available in both metric and imperial bore sizes. They have excellent moisture resistance and require no maintenance.

### Materials

Housing: Steel 230M07PB Chemi-black finish  
Race: GR-Nylon LV-3H  
Ball: Bearing Steel 100Cr6, case hardened & electro-less Nickel plated

### Features

Metric & imperial bore sizes  
Low friction  
Self-lubricating  
Good wear resistance  
Excellent moisture resistance  
No maintenance  
Studded option

### Possible Applications

Light to medium/heavy industrial/mechanical applications  
Construction Equipment  
Agricultural Equipment  
Recreational vehicles  
Precision equipment

### Temperature Range

-30°C to +170°C

### Specification

ELV & RoHS compliant



## SPH - SERIES | SPH

## PAGE 2

### Description

SPH-Series is our 3 piece unique Internationally patented range of spherical bearings incorporating a Grilamid bearing race that provides ultra smooth operation. A Nitrotec surface protected ball with a PTFE lubricant provide superior shock load and extended wear properties combined with excellent chemical and corrosion resistance. The unique innovative captive body design prevents detachment through excessive axial loads.

### Material Specifications

Housing: Steel 230M07PB Zinc plated white & blue passivate (silver/clear)  
Race: Grilamid L20LF  
Ball: 230M07PB Nitrotec finish

### Features

Metric bore sizes  
Safety features  
High shock loads  
Extended wear life  
No maintenance

### Possible Applications

Light to medium industrial/mechanical applications  
Construction Equipment  
Agricultural Equipment  
Recreational vehicles  
High precision motion control

### Temperature Range

-40°C to +80°C

### Specification

ELV & RoHS compliant



## GE-ES - SERIES | GE-ES - GEH-ES

## PAGE 3

### Description

GE-ES Series is our 2-piece fractured outer ring metric range of spherical plain bearings used in non rotational applications. Ball and race sliding surfaces are treated with MoS2 for increased lubricity on wear surface. A lubrication groove is provided on the raceway for applications requiring re-lubrication after installation.

### Material Specifications

Outer ring: Bearing steel 100Cr6, case hardened & Manganese phosphated, treated with MoS2  
Ball: Bearing steel 100Cr6, case hardened & Manganese phosphate  
Seals: Polyurethane

### Features

Metric bore sizes  
Low cost  
Maintenance required  
Up to 140mm bore sizes available

### Possible Applications

Light to heavy industrial/mechanical applications  
Construction Equipment  
Agricultural Equipment  
Hydraulic applications

### Temperature Range

-54°C to +121°C

### Specification

ELV & RoHS compliant



## GEZ-ES - SERIES | GEZ-ES

PAGE 4

### Description

GEZ-ES series is our 2-piece fractured outer ring imperial range of spherical plain bearings used in non rotational applications. Ball and race sliding surfaces are treated with MoS2 for increased lubricity on wear surface. A lubrication groove is provided on the raceway for applications requiring re-lubrication after installation.

### Material Specifications

Outer ring: Bearing steel 100Cr6, case hardened & Manganese phosphated, treated with MoS2  
 Ball: Bearing steel 100Cr6, case hardened & Manganese phosphate  
 Seals: Polyurethane

### Features

Imperial bore sizes  
 Low cost  
 Maintenance required  
 Up to 140mm bore sizes available

### Temperature Range

-54°C to +121°C

### Possible Applications

Light to heavy industrial/mechanical applications  
 Construction Equipment  
 Agricultural Equipment  
 Hydraulic applications

### Specification

ELV & RoHS compliant



## GE-UK - SERIES | GE-UK

PAGE 5

### Description

GE-UK series is our 2-piece metric range of general purpose spherical plain bearings incorporating a thin PTFE fabric between the ball and the outer ring, suitable for high shock loads and medium to heavy industrial/mechanical load applications requiring low friction, they do not require maintenance.

### Material Specifications

Outer ring: Bearing steel 100Cr6, case hardened  
 Ball: Bearing steel 100Cr6, case hardened & electro-less Nickel plated  
 Liner: PTFE fabric  
 Seals: Polyurethane

### Features

Metric bore sizes  
 Low friction  
 High shock loads  
 Extended wear life  
 No maintenance

### Temperature Range

-53°C to +121°C

### Possible Applications

Medium/heavy industrial/mechanical applications  
 Construction Equipment  
 Agricultural Equipment  
 Recreational vehicles  
 High precision motion control

### Specification

ELV & RoHS compliant



## GE-FW - SERIES | GE-FW

PAGE 6

### Description

GE-FW series is our 2-piece metric range of general purpose spherical plain bearings incorporating a thin PTFE fabric between the ball and the outer ring, suitable for high shock loads and medium to heavy industrial/mechanical load applications requiring low friction, they do not require maintenance.

### Material Specifications

Outer ring: Bearing steel 100Cr6, case hardened  
 Ball: Bearing steel 100Cr6, case hardened & electro-less Nickel plated  
 Liner: PTFE fabric  
 Seals: Polyurethane

### Features

Metric bore sizes  
 Low friction  
 High shock loads  
 Extended wear life  
 No maintenance

### Temperature Range

-53°C to +121°C

### Possible Applications

Medium/heavy industrial/mechanical applications  
 Construction Equipment  
 Agricultural Equipment  
 Recreational vehicles  
 High precision motion control

### Specification

ELV & RoHS compliant



### Description

COM & COM-T series is our 2-piece metric range of general purpose spherical plain bearings the "-T" design incorporates a thin PTFE fabric between the ball and the outer ring, suitable for high shock loads and medium industrial/mechanical load applications requiring low friction, they do not require maintenance. Dimensions suited to auto-sport and racing applications.

### Material Specifications

Outer ring: Bearing steel 100Cr6

Ball: Bearing steel 100Cr6, case hardened & electro-less Nickel plated

Liner: PTFE fabric

### Features

Imperial bore sizes

Low friction

High shock loads

Auto-sport dimensions

No maintenance

### Possible Applications

Medium industrial/mechanical applications

Auto-sport

Recreational vehicles

### Temperature Range

-54°C to +121°C

### Specification

ELV & RoHS compliant



## NOTES |

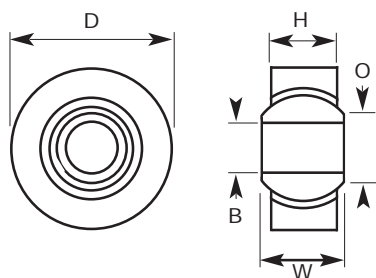
All Metric spherical bearings are based on DIN648 and all imperial spherical bearings are based on SAE spec J1120.

40% of our total production is purpose made to suit individual customer requirements, therefore please do not hesitate to contact us for any item not shown or if you have a specific application, our engineering team are available to help you.

All of the above catalogue spherical bearings are ELV & RoHS compliant, other plating options are available but may not be ELV & RoHS compliant, please refer to our "Plating Options" section for full details and availability.

Every care has been taken to ensure the accuracy of the information contained in the following pages of this publication. No liability can be accepted for any loss or damage whether direct or indirect or consequential arising out of the use of the information contained herein. The stated load rating and design options are provided as an indication only and customers should test the suitability of all products to their own satisfaction, applications vary immensely therefore samples are available for this purpose.

## SPM - SERIES MAINTENANCE FREE SPHERICAL BEARINGS



### Materials

**Housing:** Steel 230M07PB, Chemi-blackd.

**Race:** GR-Nylon, LV-3H.

**Ball:** Bearing Steel 100Cr6, case hardened & electro-less Nickel plated.

### Specification

ELV & RoHS Compliant.



## METRIC

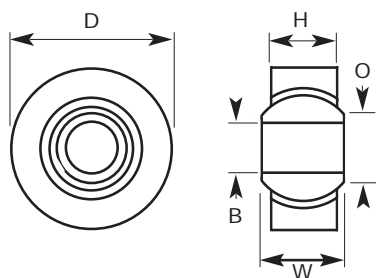
PART No.	BORE SIZE	W	H	D	O	STATIC LOAD RATING (NEWTONS) RADIAL
SP-M03	3	6	4.50	16	5.20	3,040
SP-M04-3	3	7	5.00	18	6.30	4,060
SP-M04	4	7	5.00	18	6.30	4,060
SP-M05-4	4	8	6.00	16	7.50	5,340
SP-M05	5	8	6.00	16	7.50	5,340
SP-M06-5	5	9	6.75	18	9.30	7,720
SP-M06	6	9	6.75	18	9.30	7,720
SP-M08-6	6	12	9.00	22	10.40	12,775
JBS 8N	8	12	7.90	22	10.40	12,775
SP-M08	8	12	9.00	22	10.40	12,775
SP-M10-8	8	14	10.50	26	12.90	16,960
JBS 10N	10	14	9.50	26	12.90	16,960
SP-M10	10	14	10.50	26	12.90	16,960
SP-M12-10	10	16	12.00	30	15.40	22,900
SP-M12	12	16	12.00	30	15.40	22,900
SP-M14-12	12	19	13.50	34	16.80	28,950
SP-M14	14	19	13.50	34	16.80	28,950
SP-M16-14	14	21	15.00	38	19.38	37,130
SP-M16	16	21	15.00	38	19.38	37,130

## IMPERIAL

## SPI - SERIES

PART No.	BORE SIZE	W	H	D	O	STATIC LOAD RATING (NEWTONS) RADIAL
SP-03	3/16	0.281	0.218	0.5625	0.293	4,900
SP-04-03	3/16	0.343	0.250	0.6562	0.364	7,150
SP-04	1/4	0.343	0.250	0.6562	0.364	7,150
SP-05-04	1/4	0.375	0.281	0.7500	0.419	12,000
SP-05	5/16	0.375	0.281	0.7500	0.419	12,000
SP-06-05	5/16	0.406	0.312	0.8125	0.475	13,090
SP-06	3/8	0.406	0.312	0.8125	0.475	13,090
SP-07-06	3/8	0.437	0.343	0.9062	0.530	16,100
SP-07	7/16	0.437	0.343	0.9062	0.530	16,100
SP-08-07	7/16	0.500	0.390	1.0000	0.600	19,250
SP-08	1/2	0.500	0.390	1.0000	0.600	19,250
SP-10-08	1/2	0.625	0.500	1.1875	0.739	30,250
SP-10	5/8	0.625	0.500	1.1875	0.739	30,250

## SPH - SERIES MAINTENANCE FREE SPHERICAL BEARINGS



### Materials

**Housing:** Steel 230M07PB, Zinc plated white & blue passivate (silver & clear).

**Race:** Grilamid L20LF.

**Ball:** 230M07PB Nitrotec Finish.

**Lubricant:** Uniflor Oil.

### Specification

ELV & RoHS Compliant.

**International  
Patented Design.**

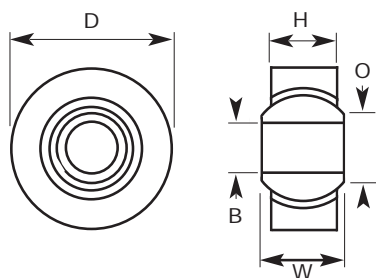


## METRIC

PART No.	BORE SIZE	W	H	D	O	STATIC LOAD RATING (NEWTONS) RADIAL
SPHM6	6	9	6.75	18	9.30	9,300
SPHM8	8	12	9.00	22	10.40	14,100
JBS8H	8	12	7.90	22	10.40	14,100
SPHM10	10	14	10.50	26	12.90	18,690
JBS10H	10	14	9.50	26	12.90	18,690
SPHM12	12	16	12.00	30	15.50	24,555
SPHM14	14	19	13.50	34	16.80	34,650
SPHM16	16	21	15.00	38	19.38	41,250



## GE - ES SERIES MAINTENANCE FREE SPHERICAL BEARINGS



### Materials

**Outer Ring:** Bearing Steel 100Cr6, case hardened & Manganese phosphated wear faces treated with MOs2.

**Ball:** Bearing Steel 100Cr6, case hardened & Manganese phosphated.

**Seals:** Polyurethane.

### Specification

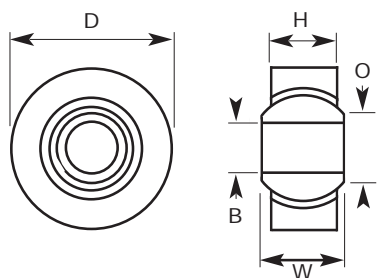
ELV & RoHS Compliant.



## METRIC

PART NO. UNSEALED	PART NO. SEALED	BORE SIZE	W	H	D	STATIC LOAD RATING (NEWTONS) RADIAL
GE06ES	GE06ES2RS	6	6	4	14	3,400
GE08ES	GE08ES2RS	8	8	5	16	5,500
GE10ES	GE10ES2RS	10	9	6	19	8,150
GE12ES	GE12ES2RS	12	10	7	22	10,800
GE15ES	GE15ES2RS	15	12	9	26	17,000
GE17ES	GE17ES2RS	17	14	10	30	21,200
GE20ES	GE20ES2RS	20	16	12	35	30,000
GEH20ES	GEH20ES2RS	20	25	16	42	48,000
GE25ES	GE25ES2RS	25	20	16	42	48,000
GEH25ES	GEH25ES2RS	25	28	18	47	54,000
GE30ES	GE30ES2RS	30	22	18	47	62,000
GEH30ES	GEH30ES2RS	30	32	20	55	80,000
GE35ES	GE35ES2RS	35	25	20	55	80,000
GEH35ES	GEH35ES2RS	35	35	23	62	100,000
GE40ES	GE40ES2RS	40	28	22	62	100,000
GEH40ES	GEH40ES2RS	40	40	25	68	127,000
GE45ES	GE45ES2RS	45	32	25	68	127,000
GEH45ES	GEH45ES2RS	45	43	28	75	156,000
GE50ES	GE50ES2RS	50	35	28	75	156,000
GEH50ES	GEH50ES2RS	50	56	36	90	245,000
GE60ES	GE60ES2RS	60	44	36	90	245,000
GEH60ES	GEH60ES2RS	60	63	40	105	315,000
GE70ES	GE70ES2RS	70	49	40	105	315,000
GEH70ES	GEH70ES2RS	70	70	45	120	400,000
GE80ES	GE80ES2RS	80	55	45	120	400,000
GEH80ES	GEH80ES2RS	80	75	50	130	490,000
GE90ES	GE90ES2RS	90	60	50	130	490,000
GEH90ES	GEH90ES2RS	90	85	55	150	610,000
GE100ES	GE100ES2RS	100	70	55	150	610,000
GE110ES	GE110ES2RS	110	70	55	160	655,000
GE120ES	GE120ES2RS	120	85	70	180	950,000
GE140ES	GE140ES2RS	140	90	70	210	1,080,000

## GEZ - ES SERIES MAINTENANCE FREE SPHERICAL BEARINGS



### Materials

**Outer Ring:** Bearing Steel 100Cr6, case hardened & Manganese phosphated wear faces treated with MOs2.

**Ball:** Bearing Steel 100Cr6, case hardened & Manganese phosphated.

**Seals:** Polyurethane.

### Specification

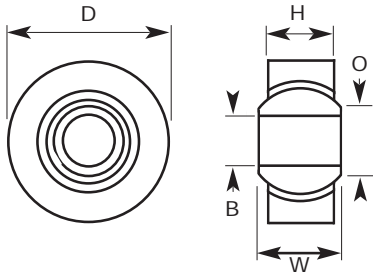
ELV & RoHS Compliant.

## IMPERIAL

PART NO. UNSEALED	PART NO. SEALED	BORE SIZE	B	W	H	D	STATIC LOAD RATING (NEWTONS) RADIAL
GEZ008ES	GEZ008ES2RS	1/2	12.700	11.100	9.525	22.225	13,000
GEZ010ES	GEZ010ES2RS	5/8	15.875	13.894	11.913	26.988	22,000
GEZ012ES	GEZ012ES2RS	3/4	19.050	16.662	14.275	31.750	31,000
GEZ014ES	GEZ014ES2RS	7/8	22.225	19.431	16.662	36.513	42,000
GEZ100ES	GEZ100ES2RS	1	25.400	22.225	19.050	41.275	56,000
GEZ104ES	GEZ104ES2RS	1-1/4	31.750	27.762	23.800	50.800	86,000
GEZ106ES	GEZ106ES2RS	1-3/8	34.925	30.150	26.187	55.563	102,000
GEZ108ES	GEZ108ES2RS	1-1/2	38.100	33.325	28.575	61.913	125,000
GEZ112ES	GEZ112ES2RS	1-3/4	44.450	38.887	33.325	71.438	170,000
GEZ200ES	GEZ200ES2RS	2	50.800	44.450	38.100	80.963	224,000
GEZ204ES	GEZ204ES2RS	2-1/4	57.150	50.013	42.850	90.488	280,000
GEZ208ES	GEZ208ES2RS	2-1/2	63.500	55.550	47.625	100.013	355,000
GEZ212ES	GEZ212ES2RS	2-3/4	69.850	61.112	52.375	111.125	415,000
GEZ300ES	GEZ300ES2RS	3	76.200	66.675	57.150	120.65	500,000
GEZ304ES	GEZ304ES2RS	3-1/4	82.550	72.238	61.900	130.175	585,000
GEZ308ES	GEZ308ES2RS	3-1/2	88.900	77.775	66.675	139.700	680,000



## GE - UK SERIES MAINTENANCE FREE SPHERICAL BEARINGS



### Materials

**Outer Ring:** Bearing Steel 100Cr6, case hardened.

**Ball:** Bearing Steel 100Cr6, case hardened & electro-less Nickel plated.

**Liner:** PTFE fabric.

### Specification

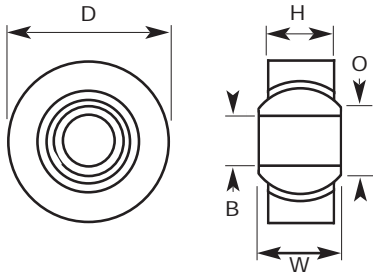
ELV & RoHS Compliant.



## METRIC

PART NO. UNSEALED	PART NO. SEALED	BORE SIZE	W	H	D	STATIC LOAD RATING (NEWTONS) RADIAL
GE6UK		6	6	4	14	3,600
GE8UK		8	8	5	16	5,800
GE10UK		10	9	6	19	8,600
GE12UK		12	10	7	22	11,000
GE15UK		15	12	9	26	18,000
GE17UK	GE17UK2RS	17	14	10	30	22,000
GE20UK	GE20UK2RS	20	16	12	35	31,000
GE25UK	GE25UK2RS	25	20	16	42	51,000
GE30UK	GE30UK2RS	30	22	18	47	65,000
GE35UK	GE35UK2RS	35	25	20	55	112,000
GE40UK	GE40UK2RS	40	28	22	62	140,000
GE45UK	GE45UK2RS	45	32	25	68	180,000
GE50UK	GE50UK2RS	50	35	28	75	220,000
GE60UK	GE60UK2RS	60	44	36	90	345,000
GE70UK	GE70UK2RS	70	49	40	105	440,000
GE80UK	GE80UK2RS	80	55	45	120	567,000
GE90UK	GE90UK2RS	90	60	50	130	690,000
GE100UK	GE100UK2RS	100	70	55	150	858,000
GE110UK	GE110UK2RS	110	70	55	160	924,000
GE120UK	GE120UK2RS	120	85	70	180	1,340,000

## GE - FW SERIES MAINTENANCE FREE SPHERICAL BEARINGS



### Materials

**Outer Ring:** Bearing Steel 100Cr6, case hardened.

**Ball:** Bearing Steel 100Cr6, case hardened & electro-less Nickel plated.

**Liner:** PTFE fabric.

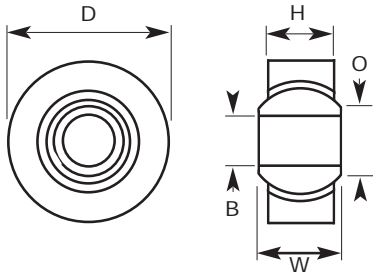
### Specification

ELV & RoHS Compliant.

## METRIC

PART NO. UNSEALED	PART NO. SEALED	BORE SIZE	W	H	D	STATIC LOAD RATING (NEWTONS) RADIAL
GE6FW		6	9	5	16	5,800
GE8FW		8	11	6	19	8,600
GE10FW		10	12	7	22	11,000
GE12FW		12	15	9	26	18,000
GE15FW		15	16	10	30	22,000
GE17FW		17	20	12	35	31,000
GE20FW		20	25	16	42	51,000
GE25FW		25	28	18	47	65,000
GE30FW	GE30FW2RS	30	32	20	55	112,000
GE35FW	GE35FW2RS	35	35	23	62	140,000
GE40FW	GE40FW2RS	40	40	25	68	180,000
GE45FW	GE45FW2RS	45	43	28	75	220,000
GE50FW	GE50FW2RS	50	56	36	90	345,000
GE60FW	GE60FW2RS	60	63	40	105	440,000
GE70FW	GE70FW2RS	70	70	45	120	570,000
GE80FW	GE80FW2RS	80	75	50	130	695,000
GE90FW	GE90FW2RS	90	85	55	150	865,000
GE100FW	GE100FW2RS	100	85	55	160	930,000

## COM - SERIES MAINTENANCE FREE SPHERICAL BEARINGS



### Materials

**Outer Ring:** Bearing Steel 100Cr6.

**Ball:** Bearing Steel 100Cr6, case hardened & electro-less Nickel plated.

**Liner:** (Indicated by Part No.s ending "T") PTFE fabric.

### Specification

ELV & RoHS Compliant.

## IMPERIAL

PART No.	BORE SIZE	W	H	D	O	STATIC LOAD RATING (NEWTONS) RADIAL
COM-03	3/16	0.281	0.218	0.563	0.293	14,464
COM-03T	3/16	0.281	0.218	0.563	0.293	14,464
COM-04	1/4	0.343	0.250	0.656	0.364	22,015
COM-04T	1/4	0.343	0.250	0.656	0.364	22,015
COM-05	5/16	0.375	0.281	0.750	0.419	28,800
COM-05T	5/16	0.375	0.281	0.750	0.419	28,800
COM-06	3/8	0.406	0.312	0.813	0.516	37,361
COM-06T	3/8	0.406	0.312	0.813	0.516	37,361
COM-07	7/16	0.437	0.343	0.906	0.530	42,048
COM-07T	7/16	0.437	0.343	0.906	0.530	42,048
COM-08	1/2	0.500	0.390	1.000	0.640	58,934
COM-08T	1/2	0.500	0.390	1.000	0.640	58,934
COM-09	9/16	0.562	0.437	1.094	0.710	73,967
COM-09T	9/16	0.562	0.437	1.094	0.710	73,967
COM-10	5/8	0.625	0.500	1.187	0.780	94,658
COM-10T	5/8	0.625	0.500	1.187	0.780	94,658
COM-12	3/4	0.750	0.593	1.437	0.920	141,982
COM-12T	3/4	0.750	0.593	1.437	0.920	141,982
COM-14	7/8	0.875	0.703	1.563	0.980	186,639
COM-14T	7/8	0.875	0.703	1.563	0.980	186,639
COM-16	1	1.000	0.797	1.750	1.118	245,534
COM-16T	1	1.000	0.797	1.750	1.118	245,534