

# Conveyor Rollers

## Core Material Type / Urethane Lined Type

For Motor Integrated Rollers, see P.1162. For dedicated shafts, see P.1165. For Shaft & Roller Sets, see the next page.

| Core Material Type | Material |        | Surface Treatment          | Bearing             | Urethane Lined Type | Material |        | Hardness  | Bearing             |
|--------------------|----------|--------|----------------------------|---------------------|---------------------|----------|--------|-----------|---------------------|
|                    | Core     | Wheel  |                            |                     |                     | Core     | Lining |           |                     |
| HRO                | STKM     | Steel  | Trivalent Chromate Plating | Pressed-in Bearings | HROU                | STKM     | Steel  | Shore A90 | Pressed-in Bearings |
| HROC               |          |        | Hard Chrome Plating        | Standard Bearing    | HROH                |          |        | Shore A70 |                     |
| HROB (Silent Type) | Aluminum | Steel  | Trivalent Chromate Plating | Standard Bearing    | HROBU (Silent Type) | STKM     | Steel  | Shore A50 | Standard Bearing    |
| HROA               |          |        | Clear Anodize              | Pressed-in Bearings | HROSU               |          |        | Shore A90 |                     |
| HROS               | SUS304   | SUS304 | -                          | Pressed-in Bearings |                     | SUS304   | SUS304 |           |                     |

Urethane Lined Type

Only for No.19 and No.28 of HROB and HROBU.

Collar

\*1. HROB and HROBU :  $d_{-0.008}^{+0.15}$

\*2. Collar part of HROB and HROBU is plastic (Nylon 6).

| Part Number Type | No. | L Selection | G Selection | D    | a   | d    | (d1) | t   | * Roller Strength for Reference (N) |      |      |      |      |      |      |
|------------------|-----|-------------|-------------|------|-----|------|------|-----|-------------------------------------|------|------|------|------|------|------|
|                  |     |             |             |      |     |      |      |     | L113                                | L163 | L213 | L263 | L313 | L413 | L513 |
| HRO              | 19  | 113         | 3           | 19.1 | 5   | 6.2  | (9)  | 1.2 | 618                                 | 573  | 530  | 436  | 343  | 294  | 206  |
|                  | *22 |             |             | 22.2 | 3.5 | 6.2  | (9)  | 1.2 | 618                                 | 573  | 530  | 436  | 343  | 294  | 206  |
|                  | 28  |             |             | 28.6 | 3.5 | 8.2  | (12) | 1.2 | 1236                                | 1148 | 1059 | 873  | 687  | 588  | 412  |
|                  | 38  |             |             | 38.1 | 5.5 | 12.2 | (16) | 1.2 | 1342                                | 1342 | 1342 | 1132 | 922  | 785  | 588  |
|                  | *42 |             |             | 42.7 | 5   | 12.2 | (16) | 1.4 | 1667                                | 1628 | 1589 | 1310 | 1030 | 883  | 745  |
|                  | *50 |             |             | 50.8 | 6.5 | 12.2 | (18) | 1.6 | 1716                                | 1682 | 1648 | 1584 | 1520 | 1442 | 1147 |
| HROC             | 22  | 163         | 4           | 22.2 | 3.5 | 6.2  | (9)  | 1.2 | 618                                 | 573  | 530  | 436  | 343  | -    | -    |
|                  | 28  |             |             | 28.6 | 3.5 | 8.2  | (12) | 1.2 | 1236                                | 1148 | 1059 | 873  | 687  | -    | -    |
|                  | 38  |             |             | 38.1 | 5.5 | 12.2 | (16) | 1.2 | 1342                                | 1342 | 1342 | 1132 | 922  | -    | -    |
|                  | 42  |             |             | 42.7 | 5   | 12   | (18) | 2.3 | 2206                                | 2040 | 1875 | 1673 | 1471 | 1226 | 1040 |
|                  | 57  |             |             | 57.2 | 6.5 | 12   | (18) | 1.4 | 2942                                | 2687 | 2432 | 2319 | 2206 | 1844 | 1451 |
|                  | 57  |             |             | 57.2 | 6.5 | 12   | (18) | 1.4 | 2942                                | 2687 | 2432 | 2319 | 2206 | 1844 | 1451 |
| HROB             | 19  | 213         | 5           | 19.1 | 6   | 6    | (8)  | 1.2 | 775                                 | 721  | 667  | 549  | 431  | 373  | -    |
|                  | 28  |             |             | 28.6 | 6.5 | 8    | (10) | 1.2 | 1549                                | 1436 | 1323 | 1093 | 863  | 745  | 520  |
|                  | 38  |             |             | 38.1 | 6.5 | 12   | (18) | 2.3 | 2206                                | 2040 | 1875 | 1673 | 1471 | 1226 | 1040 |
|                  | 42  |             |             | 42.7 | 5   | 12   | (18) | 2.3 | 2942                                | 2687 | 2432 | 2319 | 2206 | 1844 | 1451 |
|                  | 57  |             |             | 57.2 | 6.5 | 12   | (18) | 1.4 | 2942                                | 2687 | 2432 | 2319 | 2206 | 1844 | 1451 |
|                  | 57  |             |             | 57.2 | 6.5 | 12   | (18) | 1.4 | 2942                                | 2687 | 2432 | 2319 | 2206 | 1844 | 1451 |
| HROA             | 28  | 313         | 5           | 28.6 | 5.5 | 8.2  | (12) | 1.6 | 617                                 | 573  | 529  | 436  | 343  | -    | -    |
|                  | 38  |             |             | 38.1 | 5   | 8.1  | (13) | 1.6 | 705                                 | 705  | 705  | 583  | 460  | -    | -    |
|                  | 57  |             |             | 57.1 | 6.5 | 12.2 | (17) | 1.6 | 784                                 | 735  | 686  | 637  | 588  | -    | -    |
|                  | 57  |             |             | 57.1 | 6.5 | 12.2 | (17) | 1.6 | 784                                 | 735  | 686  | 637  | 588  | -    | -    |
|                  | 57  |             |             | 57.1 | 6.5 | 12.2 | (17) | 1.6 | 784                                 | 735  | 686  | 637  | 588  | -    | -    |
|                  | 57  |             |             | 57.1 | 6.5 | 12.2 | (17) | 1.6 | 784                                 | 735  | 686  | 637  | 588  | -    | -    |
| HROS             | 19  | 413         | 5           | 19.0 | 5   | 6.2  | (10) | 1.2 | 432                                 | 403  | 373  | 309  | 245  | 196  | 147  |
|                  | 28  |             |             | 28.1 | 3.5 | 8.2  | (16) | 1.0 | 883                                 | 836  | 790  | 684  | 579  | 490  | 373  |
|                  | 38  |             |             | 38.1 | 3.5 | 8.2  | (16) | 1.0 | 883                                 | 836  | 790  | 684  | 579  | 490  | 373  |
|                  | 57  |             |             | 50.8 | 6.5 | 12.2 | (18) | 1.5 | 1324                                | 1250 | 1177 | 1128 | 1079 | 883  | 687  |
|                  | 57  |             |             | 50.8 | 6.5 | 12.2 | (18) | 1.5 | 1324                                | 1250 | 1177 | 1128 | 1079 | 883  | 687  |
|                  | 57  |             |             | 50.8 | 6.5 | 12.2 | (18) | 1.5 | 1324                                | 1250 | 1177 | 1128 | 1079 | 883  | 687  |

HROB and HROBU are excellent in quiet operation and durability as standard bearings are used. For No.19 and No.28 of HROB and HROBU, hubs are replaced with collars. Sizes with \* (No.22, No.42, No.50) are available for HRO only.

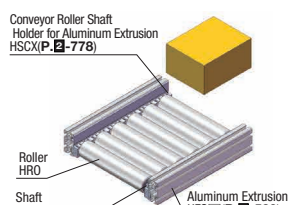
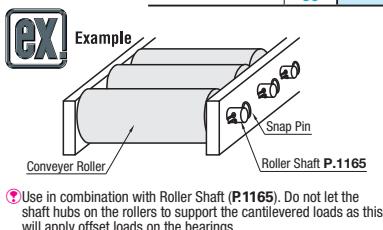
|                  |             |   |     |   |   |
|------------------|-------------|---|-----|---|---|
| Ordering Example | Part Number | - | L   | - | G |
|                  | HRO38       | - | 213 | - |   |
|                  | HRO38       | - | 213 | - | 3 |

| Part Number Type | No. | Unit Price |      |      |      |      |      |      |
|------------------|-----|------------|------|------|------|------|------|------|
|                  |     | L113       | L163 | L213 | L263 | L313 | L413 | L513 |
| HRO              | 19  |            |      |      |      |      |      |      |
|                  | 22  |            |      |      |      |      |      |      |
|                  | 28  |            |      |      |      |      |      |      |
|                  | 38  |            |      |      |      |      |      |      |
|                  | 42  |            |      |      |      |      |      |      |
|                  | 50  |            |      |      |      |      |      |      |
| HROC             | 22  |            |      |      |      |      |      |      |
|                  | 28  |            |      |      |      |      |      |      |
|                  | 38  |            |      |      |      |      |      |      |
|                  | 42  |            |      |      |      |      |      |      |
|                  | 57  |            |      |      |      |      |      |      |
|                  | 57  |            |      |      |      |      |      |      |
| HROB             | 19  |            |      |      |      |      |      |      |
|                  | 28  |            |      |      |      |      |      |      |
|                  | 38  |            |      |      |      |      |      |      |
|                  | 42  |            |      |      |      |      |      |      |
|                  | 57  |            |      |      |      |      |      |      |
|                  | 57  |            |      |      |      |      |      |      |

For HROG and HROH, the unit prices in the table are to be multiplied by 1.1.

| Part Number Type | No. | Unit Price |      |      |      |      |      |      |
|------------------|-----|------------|------|------|------|------|------|------|
|                  |     | L113       | L163 | L213 | L263 | L313 | L413 | L513 |
| HROA             | 28  |            |      |      |      |      |      |      |
|                  | 38  |            |      |      |      |      |      |      |
|                  | 57  |            |      |      |      |      |      |      |
|                  | 57  |            |      |      |      |      |      |      |
|                  | 57  |            |      |      |      |      |      |      |
|                  | 57  |            |      |      |      |      |      |      |
| HROS             | 19  |            |      |      |      |      |      |      |
|                  | 28  |            |      |      |      |      |      |      |
|                  | 38  |            |      |      |      |      |      |      |
|                  | 50  |            |      |      |      |      |      |      |
|                  | 57  |            |      |      |      |      |      |      |
|                  | 57  |            |      |      |      |      |      |      |
| HROU             | 19  |            |      |      |      |      |      |      |
|                  | 28  |            |      |      |      |      |      |      |
|                  | 38  |            |      |      |      |      |      |      |
|                  | 57  |            |      |      |      |      |      |      |
|                  | 57  |            |      |      |      |      |      |      |
|                  | 57  |            |      |      |      |      |      |      |
| HROBU            | 19  |            |      |      |      |      |      |      |
|                  | 28  |            |      |      |      |      |      |      |
|                  | 38  |            |      |      |      |      |      |      |
|                  | 42  |            |      |      |      |      |      |      |
|                  | 57  |            |      |      |      |      |      |      |
|                  | 57  |            |      |      |      |      |      |      |
| HROSU            | 19  |            |      |      |      |      |      |      |
|                  | 28  |            |      |      |      |      |      |      |
|                  | 38  |            |      |      |      |      |      |      |
|                  | 50  |            |      |      |      |      |      |      |
|                  | 57  |            |      |      |      |      |      |      |
|                  | 57  |            |      |      |      |      |      |      |

|                                                      |                                                                                                                                                                                                                                       |   |     |   |   |   |       |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|-----|---|---|---|-------|
| Alterations                                          | Part Number                                                                                                                                                                                                                           | - | L   | - | G | - | (UDC) |
|                                                      | HROU38                                                                                                                                                                                                                                | - | 213 | - | 3 | - | UDC   |
| Alteration Code                                      | Spec.                                                                                                                                                                                                                                 |   |     |   |   |   |       |
| Antistatic Urethane Change to (Urethane Color: Gray) | Changes Urethane Lined Type Shore A90 to Antistatic Urethane. (Ordering Code) UDC Specific Volume Resistivity $2.1 \times 10^8 \Omega \cdot \text{cm}$ Surface Resistivity $4.0 \times 10^9 \Omega$ (Temperature 30°C / Humidity 60%) |   |     |   |   |   |       |



# Conveyor Rollers / Sprocket Integrated Rollers / Plastic Conveyor Rollers

## Shaft & Roller Sets

Features: Set of Conveyor Rollers and Economical Hollow Tube Rollers

| Material                                                                        | Rollers |           | Surface Treatment                 | Terminal Cover |
|---------------------------------------------------------------------------------|---------|-----------|-----------------------------------|----------------|
|                                                                                 | 38Ø     | 42.7, 57Ø |                                   |                |
| Material                                                                        | STKM11  | STKM12    | Trivalent Bright Chromate Plating | Plastic        |
| Conveyor Rollers - Shaft & Roller Sets                                          |         |           |                                   |                |
| Shafts and Pins are shipped as included accessories, not inserted into rollers. |         |           |                                   |                |
| Rollers                                                                         |         |           |                                   |                |
| For Ø6 Shaft                                                                    |         |           |                                   |                |
| For Ø8 Shaft                                                                    |         |           |                                   |                |
| For Ø12 Shaft                                                                   |         |           |                                   |                |

| Part Number |     | L Selection | D    | a   | d    | (d1) | t   | Set Shaft & Pin | * Roller Strength for Reference (N) |      |      |      |      |      |      | Unit Price |      |      |      |      |      |      |
|-------------|-----|-------------|------|-----|------|------|-----|-----------------|-------------------------------------|------|------|------|------|------|------|------------|------|------|------|------|------|------|
| Type        | No. |             |      |     |      |      |     |                 | L113                                | L163 | L213 | L263 | L313 | L413 | L513 | L113       | L163 | L213 | L263 | L313 | L413 | L513 |
| HROJS       | 19  | 113         | 19.1 | 5   | 6.2  | (9)  | 1.2 | For Ø6          | 431                                 | 318  | 205  | 436  | 343  | 294  | 206  |            |      |      |      |      |      |      |
|             | 22  | 163         | 22.2 | 3.5 | 6.2  | (9)  | 1.2 |                 | 431                                 | -    | 205  | -    | 343  | 294  | 206  |            |      |      |      |      |      |      |
|             | 28  | 213         | 28.6 | 3.5 | 8.2  | (12) | 1.2 | For Ø8          | 490                                 | 490  | 490  | 450  | 687  | 588  | 412  |            |      |      |      |      |      |      |
|             | 38  | 263         | 38.1 | 5.5 | 12.2 | (16) | 1.2 |                 | 1342                                | 1342 | 1342 | 1132 | 922  | 785  | 588  |            |      |      |      |      |      |      |
|             | 42  | 313         | 42.7 | 5   | 12.2 | (16) | 1.4 |                 | 1667                                | 1628 | 1589 | 1310 | 1030 | 883  | 745  |            |      |      |      |      |      |      |
|             | 50  | 413         | 50.8 | 6.5 | 12.2 | (18) | 1.6 |                 | 1716                                | 1628 | 1648 | 1584 | 1520 | 1442 | 1147 |            |      |      |      |      |      |      |
|             | 57  | 513         | 57.2 | 6.5 | 12.2 | (18) | 1.4 |                 | 2354                                | 2206 | 2059 | 1912 | 1765 | 1471 | 1157 |            |      |      |      |      |      |      |

|                  |             |   |     |
|------------------|-------------|---|-----|
| Ordering Example | Part Number | - | L   |
|                  | HROJS38     | - | 263 |

Features: Rollers with integrated sprockets for synchronizing.

| Part Number Type | No. | L Selection | D    | d  | a  | b  | e   | t   | Roller Strength (N) |      |      |      |      | Unit Price 1~4 pc. |      |      |      |      |
|------------------|-----|-------------|------|----|----|----|-----|-----|---------------------|------|------|------|------|--------------------|------|------|------|------|
|                  |     |             |      |    |    |    |     |     | L100                | L200 | L300 | L400 | L500 | L100               | L200 | L300 | L400 | L500 |
| HROSSP           | 38  | 100         | 38.1 | 12 | 12 | 14 | 3.5 | 2.3 | 883                 | 809  | 588  | 490  | 417  |                    |      |      |      |      |
|                  | 57  | 300         | 57.2 | 12 | 12 | 13 | 3.5 | 2.1 | 883                 | 834  | 735  | 539  | 441  |                    |      |      |      |      |
|                  | 57  | 300         | 57.2 | 12 | 12 | 13 | 3.5 | 2.1 | 883                 | 834  | 735  | 539  | 441  |                    |      |      |      |      |