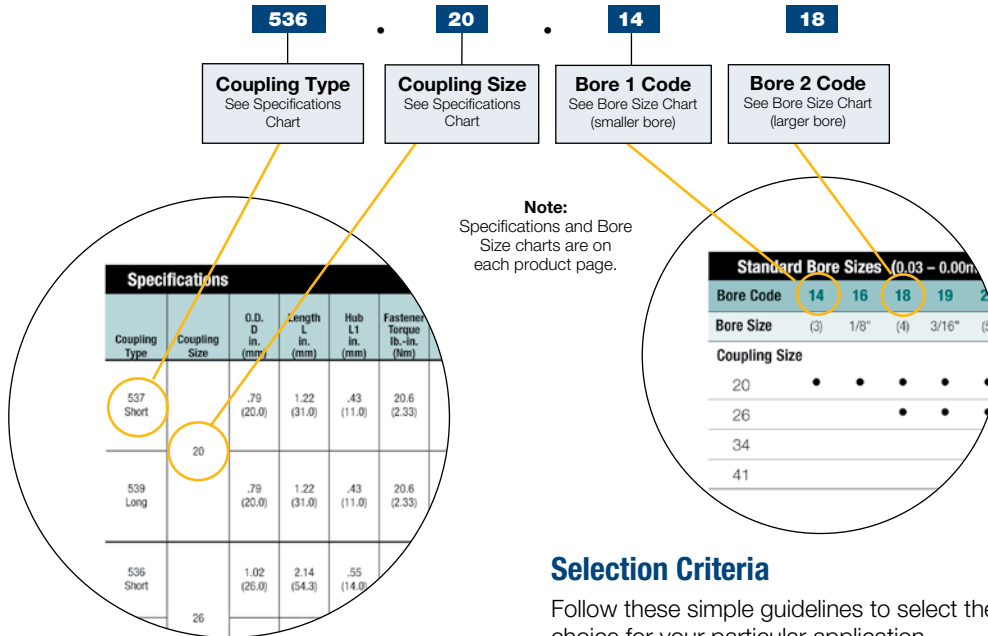


# Selecting Flexible Couplings

Building an Ordering Part Number is fast and easy using the Specifications and Bore Size charts on each product page. Simply select the coupling type, coupling size and two bore sizes you require (always place smaller bore first). Always include (.) in Part Number.

Ordering Number System **Example: 536.20.1418**



The following key factors should always be considered when specifying flexible shaft couplings:

- Torsional Stiffness
- Backlash
- Torque
- Life
- Shaft Attachment Type
- Misalignment Requirements

## Service Factors

- Torque capacity values shown in the coupling specification charts assume uniform load conditions at a constant speed with no misalignment or axial displacement. See page 48 to provide adequate service factors.
- The torque capacity of flexible couplings will reduce when acceleration is present (eg: stop/start or reverse conditions).
- The more severe the acceleration, the greater reduction in torque capacity.
- The more severe the misalignment, the greater reduction in torque capacity.
- Sliding couplings (Oldham and UniLat) are subject to a wear rate dependant on the number of cycles completed and environmental factors.

## Selection Criteria

Follow these simple guidelines to select the optimal coupling choice for your particular application.

- Does the coupling provide adequate misalignment protection?
- Can it transmit the required torque?
- Can it sustain the required rotational speed?
- Will it fit in the available space envelope?
- Can it operate at the designated ambient temperature?
- Will it provide the torsional stiffness required for positional accuracy?
- Does it provide electrical isolation between the shafts?
- Will it provide the required life expectancy?
- Is axial motion or axial stiffness required?

	Load				
	Steady State	Stop/Start	Reversing	Shock	Shock & Reversing
<b>Huco Flex B</b>	1.5	2.0	2.0	3.0	4.0
<b>Huco Flex K</b>	1.5	2.0	2.0	3.0	4.0
<b>Huco Flex M</b>	1.5	2.0	2.0	3.0	4.0
<b>Huco Flex Ni</b>	1.0	2.0	2.0	3.0	4.0
<b>Huco Flex P</b>	1.0	1.5	1.5	3.0	4.0
<b>Huco Flex G</b>	1.0	2.0	4.0	4.0	4.0
<b>Huco MultiBeam</b>	1.0	1.5	2.0	(Note 1)	(Note 1)
<b>Huco S-Beam</b>	1.0	1.5	2.0	(Note 1)	(Note 1)
<b>Huco TorqLink</b>	1.0	1.5	2.0	(Note 1)	(Note 1)
Duty (Hours/Day)					
	<1	1-2	3-5	6-12	>12
<b>Huco Oldham</b>	1.0	2.0	4.0	6.0	8.0
<b>Huco Flex-B</b>	1.0	1.5	2.0	3.0	4.0
<b>Uni-Lat</b>	1.0	1.5	2.0	3.0	4.0

\* Note 1 - Not recommended in these conditions.

# Selecting Flexible Couplings

## Round & Keywayed Bore Details & Codes

Metric mm	Inch fraction	Inch decimal	Round bore code	Metric keys key size w x h	Inch keys key size w x h	Keywayed bore code
1	—	0.0394	<b>08</b>	—	—	—
1.5	—	0.0591	<b>09</b>	—	—	—
1.588	1/16	0.0625	<b>10</b>	—	—	—
2	—	0.0787	<b>11</b>	—	—	—
2.286	—	0.0900	<b>12</b>	—	—	—
2.382	3/32	0.0938	<b>13</b>	—	—	—
3	—	0.1181	<b>14</b>	—	—	—
3.048	—	0.1200	<b>15</b>	—	—	—
3.175	1/8	0.1250	<b>16</b>	—	—	—
*3.969	5/32	0.1563	—	—	—	—
4	—	0.1575	<b>18</b>	—	—	—
4.763	3/16	0.1875	<b>19</b>	—	—	—
5	—	0.1969	<b>20</b>	—	—	—
5.556	7/32	0.2188	<b>21</b>	—	—	—
6	—	0.2362	<b>22</b>	—	—	—
6.096	—	0.2400	<b>23</b>	—	—	—
6.350	1/4	0.2500	<b>24</b>	—	—	—
7	—	0.2756	<b>25</b>	2 x 2	—	P25
7.144	9/32	0.2813	<b>26</b>	—	—	—
7.938	5/16	0.3125	<b>27</b>	—	1/8 x 1/8	R27
8	—	0.3150	<b>28</b>	2 x 2	—	P28
8.731	11/32	0.3438	<b>29</b>	—	1/8 x 1/8	R29
9	—	0.3543	<b>30</b>	3 x 3	—	P30
9.525	3/8	0.3750	<b>31</b>	—	1/8 x 1/8	R31
10	—	0.3937	<b>32</b>	3 x 3	—	P32
11	—	0.4331	<b>33</b>	4 x 4	—	P33
11.113	7/16	0.4375	<b>34</b>	—	1/8 x 1/8	R34
12	—	0.4724	<b>35</b>	4 x 4	—	P35
12.700	1/2	0.5000	<b>36</b>	—	1/8 x 1/8	R36
13	—	0.5118	<b>37</b>	5 x 5	—	P37
14	—	0.5512	<b>38</b>	5 x 5	—	P38
14.288	9/16	0.5625	<b>39</b>	—	3/16 x 3/16	R39
15	—	0.5906	<b>40</b>	5 x 5	—	P40
15.875	5/8	0.6250	<b>41</b>	—	3/16 x 3/16	R41
16	—	0.6299	<b>42</b>	5 x 5	—	P42
17	—	0.6693	<b>43</b>	5 x 5	—	P43
17.463	11/16	0.6875	<b>44</b>	—	3/16 x 3/16	R44
18	—	0.7087	<b>45</b>	6 x 6	—	P45
19	—	0.7480	<b>46</b>	6 x 6	—	P46
19.050	3/4	0.7500	<b>47</b>	—	3/16 x 3/16	R47
20	—	0.7874	<b>48</b>	6 x 6	—	P48
22	—	0.8661	<b>49</b>	6 x 6	—	P49
22.225	7/8	0.8750	<b>50</b>	—	1/4 x 1/4	R50
24	—	0.9449	<b>51</b>	8 x 7	—	P51
25	—	0.9843	<b>52</b>	8 x 7	—	P52
25.400	1	1.0000	<b>53</b>	—	1/4 x 1/4	R53
28	—	1.1024	<b>54</b>	8 x 7	—	P54
28.575	1-1/8	1.1250	<b>55</b>	—	5/16 x 1/4	R55
30	—	1.1811	<b>56</b>	8 x 7	—	P56
31.750	1-1/4	1.2500	<b>57</b>	—	5/16 x 1/4	R57

\* Not manufactured. Nearest alternative 4mm.

## Round & Keywayed Bore Details & Codes Cont.

Metric mm	Inch fraction	Inch decimal	Round bore code	Metric keys key size w x h	Inch keys key size w x h	Keywayed bore code
32	—	1.2598	<b>58</b>	10 x 8	—	P58
34.925	1-3/8	1.3750	<b>59</b>	—	3/8 x 1/4	R59
35	—	1.3780	<b>60</b>	10 x 8	—	P60
38	—	1.4961	<b>61</b>	10 x 8	—	P61
38.10	1-1/2	1.5000	<b>62</b>	—	—	Specify on Order
40	—	1.5748	<b>63</b>	—	—	Specify on Order
41.28	1-5/8	1.6250	<b>64</b>	—	—	Specify on Order
42	—	1.6535	<b>65</b>	—	—	Specify on Order
44.45	1-3/4	1.7500	<b>66</b>	—	—	Specify on Order
45	—	1.7717	<b>67</b>	—	—	Specify on Order
47.63	1-7/8	1.8750	<b>68</b>	—	—	Specify on Order
48	—	1.8898	<b>69</b>	—	—	Specify on Order
50	—	1.9685	<b>70</b>	—	—	Specify on Order
50.80	2	2.0000	<b>71</b>	—	—	Specify on Order
53.98	2-1/8	2.1250	<b>72</b>	—	—	Specify on Order
55	—	2.1654	<b>73</b>	—	—	Specify on Order
57.15	2-1/4	2.2500	<b>74</b>	—	—	Specify on Order
60	—	2.3622	<b>75</b>	—	—	Specify on Order
60.33	2-3/8	2.3750	<b>76</b>	—	—	Specify on Order
63.50	2-1/2	2.5000	<b>77</b>	—	—	Specify on Order
65	—	2.5591	<b>78</b>	—	—	Specify on Order
73.03	2-7/8	2.8750	<b>79</b>	—	—	Specify on Order
75	—	2.9528	<b>80</b>	—	—	Specify on Order

## Specifying a Keywayed Bore

To specify a keywayed bore, prefix the 2-digit bore code number with a “P” for metric keyways or an “R” for an inch keyway.

Examples:

**Metric: 538.34.P28P28**

In this example both bores have a keyway.

**Inch: 538.34.24R36**

In this example only the second bore will have a keyway.

Standard keyways are machined to two specifications:

- Bore Codes prefixed with a “P” denote a metric keyway conforming to ISO 773/774 (BS 4235 Pt. 1).
- Bore Codes prefixed with a “R” denote an inch keyway conforming to BS 46 Pt. 1.